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ABSTRACT

In 1990, approximately 130 million children ages 6-11 (60% girls) were not attending school, and 1 in 4 adults (two-thirds women) could not read or write. The World Conference on Education for All, held in Jomtien, Thailand, in March 1990, was convened to provide educators a forum for reflecting on this inequity in the state of education. The moral imperative of Education for All (EFA) was a basic goal and theme surrounding the conference. Defining countries in transition as all developing countries struggling to meet the educational needs of their people in the context of profound social change, this book summarizes available information about what works in primary education by linking educational approaches to specific local contexts. The book provides an account of the evolving strategies of UNICEF in basic education and presents the various political, technical, methodological, and contextual considerations which must be reckoned with in meeting the challenge of basic education for all. The chapters of the book are: (1) "UNICEF and the Commitment to Primary Education"; (2) "The Context of Educational Development"; (3) "Country Priorities," including criteria for identifying educational priorities and how outcomes and priorities are measured; (4) "Components of Educational Initiatives"; (5) "Policies To Improve Access and Equity"; (6) "Improving Learning Acquisition"; (7) "Management Initiatives for Reaching the Periphery"; and (8) "The Conceptual Heritage," detailing phases and aspects of planning and analysis of educational systems including early developments, progressivism, socialist planning, access and mobility, returns on educational investment, quality, and community participation. Contains an extensive bibliography. (BGC)

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Implementing Quality Primary Education for Countries in Transition

William R. Fowlkes
Frank P. Dall

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Implementing Quality Primary Education for Countries in Transition

William K. Cummings
Frank P. Dall
1995

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Preface

If an adequate count could be taken of all the children who never enrol in a school, who enrol but drop out early, and who complete a cycle of primary education but still remain virtually illiterate because of the poor performance of the school, the total number of such educationally deprived children would be an unhappy surprise for many who consider themselves knowledgeable about education. The way educational statistics are collected and reported in many developing countries (and therefore by UNESCO) does not provide a proper accounting of how adequately children are served by primary education systems. The very fact is a negative commentary on the state of educational planning and management and on the educational priorities of many countries. Undoubtedly, children's deprivation of a primary education remains the most serious basic education challenge in the developing regions of the world.

UNICEF played a leading role with its other international partners in organizing the landmark World Conference on Education for All, held in Jomtien, Thailand, in March 1990. The aftermath of Jomtien saw a sharpening of UNICEF's focus on basic education, leading to a concentration of effort on universal primary education to be achieved through pragmatic and diversified approaches. Early childhood care and education and adult basic education -- including "second chance" primary education for youth -- were seen as essential supportive elements in the universal primary education focus.

The authors of the volume provide an account of the evolving strategies of UNICEF in basic education and present the various policy, technical, methodological, and contextual considerations which must be reckoned with in meeting the challenge of basic education for all. The term "countries in transition" in the title is taken broadly to include all developing countries struggling to meet the learning needs of their people in the context of the profound social change they are experiencing or are trying to bring about.

A dominant theme of the book is the need to adopt a comprehensive approach in dealing with the challenge of expanding basic education and improving its quality and relevance -- recognizing the importance of looking at basic education as a system with interconnected components and the critical influence of the larger societal context in which the educational system functions. This holistic view contrasts sharply with the approach that puts a premium on a specific intervention, emphasizes a particular technique or method, or concentrates on a particular component of the system; the authors are emphatically averse to the "silver bullet" approach.

The long association of both authors with the Advancing Basic Education and Literacy Project and the Bridges Project (supported by the United States

Agency for International Development) and the numerous UNICEF educational documents and records of experience to which they had access constituted plentiful sources of operational lessons and practical guidelines; these rich veins have been mined well by both authors. The concepts and terminologies that have entered the new lexicon of education in recent years and are treated in the book will be found useful by practitioners.

The authors intended the book primarily for education programme officers in UNICEF charged with the task of promoting universal primary education. In the context education for all, I am sure that national policy-making and -planning counterparts of the UNICEF staff and other international organizations, bilateral agencies, non-governmental organizations and the academic community concerned with basic education issued will also find this timely volume of practical value in their policy planning and implementation efforts.

Manzoor Ahmed
Associate Director
Programme Division
UNICEF

April 1995
New York

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Special thanks are extended to Aklilu Habte, whose wisdom and insightfulness helped guide our original thinking as to the content, purpose and possible readership for this kind of book. Other UNICEF senior staff who deserve to be acknowledged are Manzoor Ahmed and Fay Chung, who were instrumental in providing help and advice and took time out from busy schedules to comment on earlier drafts of the final version. The latter generously agreed to allow this task to be published in Arabic and English by the MENARO office in Amman.

The many UNICEF country offices that contributed by providing relevant background information such as current versions of their situation analyses, up-to-date data, case-studies and other well-timed inputs also merit our special thanks. Successful examples taken from the primary education components in their country programmes helped to enrich our text and add a practical dimension which may make this a more useful tool for those engaged in the business of promoting and implementing primary education reform *in situ*.

Work carried by Al Kutba, our Amman-based publisher, helped to craft the final draft of our book into a well-finished, professional product. Under Ellen Khouri's management, her hard-working team produced Arabic and English versions of a book which we hope will extend and inform the growing basic education debate, both in the Middle East and North Africa region and elsewhere, in ways supportive of the positive changes now required to meet the challenges of the twenty-first century. Our editor, Terri Lore Abdallat, was impressive in working our unpolished efforts into a more coherent whole. Farouk Anis Jarrar took a challenging text in English and translated this into a very elegant and readable Arabic version. Without Maha Zabaneh Madbak's computer layout skills, Jean-Claude Elias' flair for computer graphic design and Salma Khouri's efficient typing, none of this would have been completed on time.

William Cummings
and
Frank Dall

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Chapter One

UNICEF AND THE COMMITMENT TO PRIMARY EDUCATION

Leaders in the field of education gathered in Jomtien, Thailand, from 5 to 9 March 1990 to herald a new era where "every person -- child, youth and adult -- shall be able to benefit from educational opportunities designed to meet their basic learning needs."[1] Over 40 years ago, in the Universal Declaration on Human Rights, the nations of the world asserted that everyone had a right to education. In the ensuing period, much progress was made: world illiteracy was cut in half, and the proportion of children enrolled in basic education steadily increased; by 1990 the average gross primary enrolment rate for all developing countries had risen to 98 per cent, and the average illiteracy rate had decreased to 35 per cent.[2] However, after almost four decades of rapid advance, United Nations Educational, Scientific and Cultural Organization (UNESCO) Director-General Federico Mayor makes the following observation:

> *The idea of education for all has now been brought to a halt, in many nations of the developing world, by the debt crisis and consequent cuts in government spending. The past few years have witnessed an unprecedented halt in the growth of basic educational services and a stagnation and deterioration of educational quality. ... In nearly half the developing countries the goal of universal primary education is now receding rather than drawing nearer.*

The overall position in 1990 was that approximately 130 million children aged 6 to 11 (60 per cent of them girls) were not attending school, and one in four adults in the world -- almost a billion people, and two thirds of them women[3] -- could not read or write.

Using What Works

The Jomtien World Conference on Education for All was held to provide educators with a common forum for reflecting on this disturbing reversal. The delegates recommitted themselves and their Governments to renewed efforts to

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1 World Conference on Education for All (WCEFA), held in Jomtien, Thailand, from 5 to 9 March 1990: *World Declaration on Education for All* (New York, Inter-Agency Commission: UNDP/UNESCO/UNICEF/World Bank, 1990), p. 3.

2 United Nations Children's Fund (UNICEF), *Strategies to Promote Girls' Education: Policies and Programmes That Work* (New York, UNICEF, 1991), p. 3.

3 UNICEF, *The State of the World's Children 1991* (New York, Oxford University Press for UNICEF, 1991), p. 26.

move forward, seeking the moral imperative of Education for All (EFA). While in 1945 few educational leaders had a clear sense of what would be required, the delegates at Jomtien could draw on nearly a half century of experience. As they observed, "cumulative experience of reform, innovation, research and the remarkable educational progress of many countries make the goal of basic education for all -- for the first time in history -- an attainable goal."[1] Educators now have the conviction and confidence that Education for All is attainable when conditions are right.

Much is now known about what works in different circumstances. What is required to realize Education for All is to translate the knowledge available into working strategies tailored to particular settings. This effort should proceed along four parallel planes: primary education, preschool education, adult education and "third-channel" or multi-channel learning. This book seeks to summarize the available knowledge about what works in primary education by linking particular educational approaches to the challenge of specific local contexts. It lays out a strategic approach for realizing Education for All that should be of particular value to UNICEF Education Programme Officers.

The Impact of Education

The United Nations Convention on the Rights of the Child (see box 1) reflects a moral conviction that all who belong to the human family deserve the opportunity to be literate; without literacy, individuals are handicapped in their appreciation of culture and experience limitations in both finding jobs and mastering new technologies.

Box 1
The United Nations Convention on the Rights of the Child: An Added Dimension

Drafters of the 1989 United Nations Convention on the Rights of the Child (CRC) drew heavily on the relevant provisions of the International Covenant on Economic, Social and Cultural Rights (1966) and the UNESCO Convention Against Discrimination in Education (1960). Many elements contained in the UNESCO Convention are reiterated in article 28 of the CRC:

28.1. States Parties recognize the right of the child to education, and with a view to achieving this right progressively and on the basis of equal opportunity, they shall, in particular:

[1] World Conference on Education for All (WCEFA), held in Jomtien, Thailand, from 5 to 9 March 1990. *World Declaration on Education for All* (New York, Inter-Agency Commission: UNDP/UNESCO/UNICEF/World Bank, 1990), p. 2.

(a) Make primary education compulsory, available and free to all;

(b) Encourage the development of different forms of secondary education, including general and vocational education, make them available and accessible to every child, and take appropriate measures such as the introduction of free education and offering financial assistance in case of need;

(c) Make higher education accessible to all on the basis of capacity by every appropriate means,

(d) Make educational and vocational information and guidance available and accessible to all children,

(e) Take measures to encourage regular attendance at schools and the reduction of drop-out rates.

28.2. States Parties shall take all appropriate measures to ensure that school discipline is administered in a manner consistent with the child's human dignity and in conformity with the present Convention.

28.3. States Parties shall promote and encourage international cooperation in matters relating to education, in particular with a view to contributing to the elimination of ignorance and illiteracy throughout the world and facilitating access to scientific and technical knowledge and modern teaching methods. In this regard, particular account shall be taken of the needs of developing countries.

Article 28 contains provisions frequently found in international instruments promoting the right to education, including the right to compulsory and free primary education and access for all to secondary, vocational and higher education. However, the provisions of this article inevitably involve some ambiguities with regard to the specific obligations that signatories have in terms of implementing these principles. One immediate obligation is to ensure non-discriminatory policies in relation to the enjoyment of educational rights, notwithstanding the non-availability of financial resources. The only exception in this regard, in some legal systems, relates to what may be termed "affirmative action programmes"; these programmes should, however, satisfy various criteria designed to ensure that their real purpose is to achieve equality rather than to perpetuate inequality. Although the principle of non-discrimination contained in article 2 of the CRC is applicable in terms of education, the drafters apparently believed that discrimination in schools was a sufficiently serious problem to merit stressing the principle again in the context of article 28, which includes the reference to "equal opportunity".

The immediate effect of article 28 is of considerable potential importance in the field of basic education. Whatever resources are available must be allocated to ensure that the right to non-discriminatory education is enjoyed. This principle deserves emphasis, especially in countries where the shortage of resources may be used by Governments as a justification

for not enforcing the educational provisions of the CRC, particularly those relating to primary education. The importance of this principle is further reinforced by the fact that women and girls represent two thirds of those who currently lack access to both education and literacy acquisition. An overview of female education would show that women and girls generally have limited opportunities, face numerous obstacles, and receive an education that is of questionable quality and relevance.

Section 2 of article 28 establishes -- for the first time in an international instrument promoting the right to education -- that school discipline should be administered "in a manner consistent with the child's human dignity". This innovation has ramifications that clearly go beyond the provisions of earlier instruments prohibiting cruel and degrading treatment of children in schools. Section 3 of article 28, which calls for international cooperation in matters relating to education, is also innovative. Overall, however, article 28 seems largely to reflect the spirit of the pre-existing human rights provisions that inspired the CRC.

Article 29 of the CRC contains more detailed provisions in support of the kind of education that should be made available to ethnic and other minority groups. The need to provide an education that values and develops respect for the "child's parents, his or her own cultural identity, language and values" is considered an important aspect of any educational service. Article 29 also commits signatories to assist in the full development of each child's "personality, talents, and mental and physical abilities". Preparing children to live in a free society "in the spirit of understanding, peace, [and] tolerance" is another important element in a world of religious, cultural and ethnic diversity. The provisions of article 29 thus complement and extend the principles contained in article 28. They also reinforce the notion that even the smallest group has a right to an education that fully respects its cultural identity and specific language needs. This is an essential added emphasis when considering the special educational needs of the numerous (and often ignored or forgotten) children of minority groups -- children who currently lack a basic education.

Source: Frank Dall, "Basic education as a child right: the challenge of implementation", *in: Innocenti Centre Occasional Paper Series*, No. 4 (Florence, UNICEF, 1993).

Distinct from this moral rationale is a growing body of empirical evidence outlining a practical rationale. At the individual level, those who have higher "human capital" earn better wages and otherwise profit from the various rewards provided by modern societies. Economists often like to distinguish between the rewards enjoyed by the individuals who have received an education and those which benefit the society where they live. they typically conclude that the rewards for both are high -- indeed, often higher than the returns on other forms of investment. The implication is that greater investment in human capital by both individuals and Governments tends to be sensible (see box 2).

Box 2
Basic Education and Productivity:
The Ford Automobile Engine Plant in Chihuahua, Mexico

In 1982, Ford built a state-of-the-art engine assembly plant in a mainly agricultural area of northern Mexico. The plant was designed to produce 500,000 engines annually for export back to the United States. Ford hired an all-Mexican workforce; applicants had to have completed their basic education (nine years of schooling) to be considered. Ten per cent of those who had applied were selected, then screened further on the basis of a written test (passed by 75 per cent of the applicants), a medical examination and a personal interview. Once hired, all workers received training in engine assembly, and once working, received further extensive training to qualify them for more skilled jobs in the plant.

The results at Chihuahua are impressive. By 1988, the plant had become the most productive engine plant in the Ford system. Mexican workers with a completed basic education were outproducing workers in the United States and Canada. Quality control in the factory was also higher than in the other plants. Ford is currently investing another $700 million in expanding the plant's capacity.

According to Ford management in Chihuahua (Carnoy, 1989), the math and literacy skills that these young (the average age is about 22) Mexican people bring to the job as a result of their completed basic education enable Ford not only to make them competitive with American and Canadian workers, but also to train the most motivated of them to perform a number of highly skilled jobs. Many of them also go on to take additional schooling at night and to qualify for higher-level jobs at Ford or elsewhere.

The Chihuahua example and that of another Ford auto assembly plant in Hermosillo (Shaiken, 1991) suggest that widespread basic education makes possible the creation of complex productive activities in developing countries, and that these activities can be competitive in world economic markets, paving the way for sustained economic development. They also suggest that without basic education it would be difficult, if not impossible, to produce these more complex industrial products.

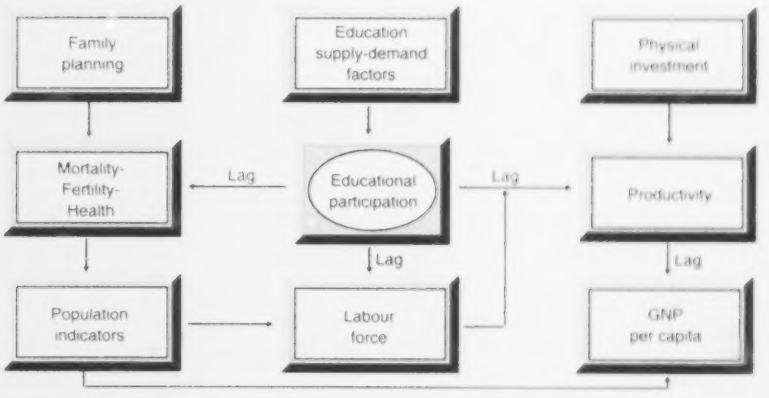
Source: Martin Carnoy, *The Case for Investing in Basic Education* (New York, UNICEF, 1992), p. 27.

A growing body of evidence is emerging which spells out the nature of the social returns of an investment in education. Figure I, summarizing a computer simulation model, helps to illustrate some of these connections.[5] The figure outlines the findings of an extensive examination of the interrelationships

[5] Luis A. Crouch, Jennifer E. Spratt, and Luis M. Cubeddu, "Examining social and economic impacts of educational investment and participation in developing countries: the Educational Impacts Model (EIM) approach," *BRIDGES Research Report Series No. 12* (Cambridge, Massachusetts, Harvard Institute for International Development, April 1992).

between a large number of cross-national economic, social and educational indicators for the 20-year period between 1965 and 1985. The analysis was restricted to 80 of the poorer countries in the world; the impact of education is not as powerful in the more developed countries, simply because many of the variables reviewed here are more fully developed in those settings, and hence less amenable to change.

Figure I. Educational Impacts Model (EIM)



Source: Luis A. Crouch, Jennifer E. Spratt, and Luis M. Cubeddu, "Examining social and economic impacts of educational investment and participation in developing countries: the Educational Impacts Model (EIM) approach," *BRIDGES Research Report Series No. 12* (Cambridge, Massachusetts, Harvard Institute for International Development, April 1992).

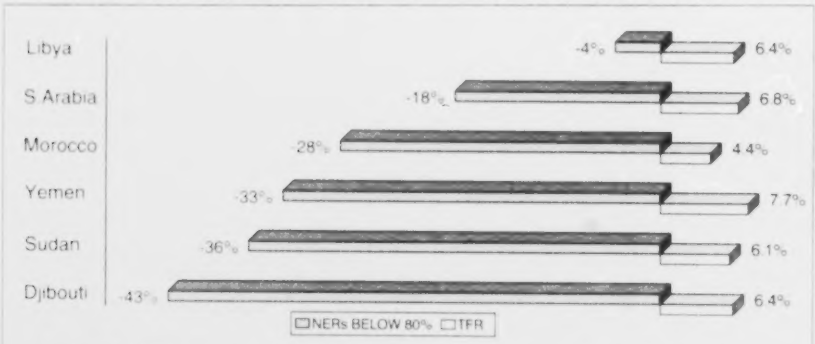
The following are some of the key relationships discovered in the analysis (starting at the top centre of figure I):

- **Increasing the budgetary allocation for primary education improves enrolment levels**. Every percentage point increase in the share of gross domestic product (GDP) allocated to primary education is associated with an increase in gross enrolment ratios of nearly 20 per cent. This is facilitated by improved internal efficiency and reduced unit costs. Other factors such as per capita income, culture and degree of urbanization have a rather weak influence on enrolment ratios relative to that of increases in budgetary allocations.

- **Increases in female enrolment are associated with decreases in the fertility rate**. If accompanied by a strong family planning programme, every 20 percentage point increase in female enrolment is associated with a decrease in fertility of 0.5 children. The maximum effect, however, takes some 20 years. High male enrolment has little measurable effect separate from high female enrolment. Figures II and III illustrate the relationship between fertility rates/population growth and female enrolment rates.

Figure II. Socio-Economic Indicators for the Middle East and North Africa Region

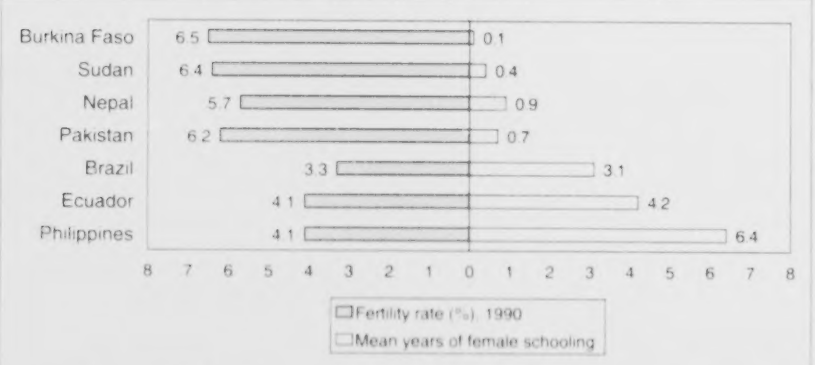
TOTAL FERTILITY RATE (TFR) FOR COUNTRIES WITH LESS THAN 80% NET ENROLMENT RATES (NERs), 1994



Sources: UNESCO, *World Education Report 1993* (Paris, UNESCO, 1993); and UNICEF, MENARO, 1994.

Figure III. Female Education and Population Growth

SELECTED COUNTRIES, 1991



Sources: UNICEF, *The State of the World's Children 1991* (New York, Oxford University Press for UNICEF, 1991); UNDP, *Human Development Report 1991* (New York, UNDP, 1991).

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- **Female education is associated with reduced infant mortality** Every 20 percentage point increase in the female secondary enrolment rate is associated with a drop in infant mortality of some 30 children per 1,000. Again, male education has no measurable effect apart from female education. No other socio-economic variables (e.g., potable water, level of urbanization or per capita income) were found to have as strong an effect as female education.

- **Female educational participation is associated with an increase both in the age at which females marry and in the likelihood that they will participate in the labour market.** The impact, though, is not as dramatic or consistent as is the case for some of the aforementioned linkages.

- **Educational participation is associated with increased life expectancy.**

- **Budgetary allocations to education compete well with other forms of social investment.** Budgetary allocations to education (as a share of national income) affect economic productivity approximately as much as allocations to overall investment. Thus, assuming a constant policy environment, and within the range estimated, educational "consumption" (which is how it is classified in national accounts) is roughly equivalent to investment as traditionally defined and measured in national accounts. However, the returns on education take considerably longer to realize than do the returns on more traditional forms of social investment.

The social returns on basic education appear to be higher in the earlier than in the later stages of development, as is illustrated by the studies of Kenya's urban labour force presented in box 3.

Education is also known to affect levels of social and political participation. More educated citizens tend to become more deeply involved in local community organizations, particularly those that have an impact on the quality of life. An educated person is more likely to become involved in social services, to sit on the board of the local government council, and to participate in community endeavors. An educated person is also more likely to become informed about local and national developments and to vote in elections. Education thus serves to support the vital social and political institutions that provide stability to the often fragile structures of newly democratized societies.[6]

[6] Martin Carnoy, *The Case for Investing in Basic Education* (New York, UNICEF, 1992).

Box 3
Rates of Return to Basic Education in Kenya: A Tale of Two Decades

Two studies conducted in Kenya under the auspices of the World Bank, one in the 1960s and the other in the 1970s, show how primary and lower secondary education serve as key elements in the economic growth process. The first of these studies surveyed workers in three Kenyan cities in 1968 and estimated rates of return for various levels of education, correcting for socio-economic background and other factors (Thais and Carnoy, 1972). The rate of return for basic education (up to Standard 7) for males at that time was 26 per cent when only private costs were taken into account and earnings were corrected for socio-economic background differences, and 18 per cent when public costs were also included. When adjusted for differential socio-economic background and ability (exam score differences), the private rate fell to 18 per cent and the social rate to 14 per cent. The corresponding rates for lower secondary school (Forms 1-4) were 19 per cent (private) and 18 per cent (social). All of these rates are high, reflecting the significant contribution of education to Kenyan productivity in the 1960s. The second study involved a survey of workers in Nairobi in 1979 (Knight and Sabot, 1990); it was found that rates of return for primary education had fallen more than secondary rates, which, even when corrected for ability differences, were still about 14 per cent (private).

Source: Martin Carnoy, *The Case for Investing in Basic Education (New York, UNICEF, 1992), p. 31.*

In sum

- Basic education is a sound social investment
- The returns on primary education are generally greater than those on secondary education or higher
- The returns on girls' education tend to be higher than those on boys' education
- There are compelling moral reasons for promoting basic education for all

It is essential to keep in mind, however, that the impact of basic education is not realized overnight, but rather shows up over the long term. Education is different from most other forms of investment; those in business circles who expect short-term returns and those in other development sectors such as health and nutrition who can see the impact of their work in a few weeks or months must make adjustments in their time-frame expectations as they move into the educational arena. This cautionary note applies directly to UNICEF Programme

Officers, who in the past may have enjoyed the thrill of immediate returns. As UNICEF becomes involved in educational improvement, expectations will have to be adjusted to fit the process-driven reality which constitutes the learning cycle.

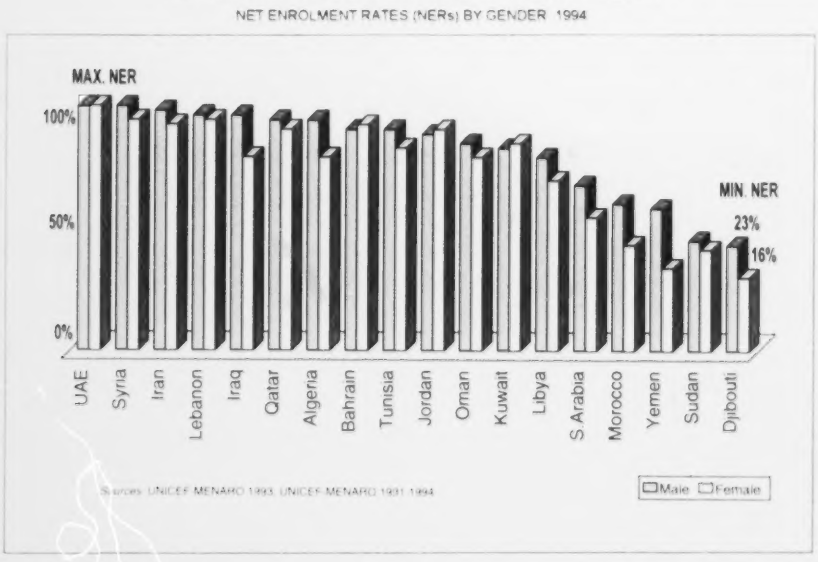
The Challenge: A Macro Perspective

The biases of the modern State are less evident in good times, when the economy is thriving and the Government can spare resources to accommodate various interests; however, when the modern State faces hard times, it is liable to turn inward and focus on its core interests and clients, neglecting the periphery.

For much of the period from the Second World War through the early 1970s, most national economies enjoyed relatively stable growth, and Governments enjoyed a steady increase in revenues. Education benefited from this growth; expanding government budgets resulted in the expansion of educational facilities -- and in most nations, in an increase in pupil enrolment ratios.

Regional disparities. Figure IV provides a comparison of trends in primary level pupil enrolment ratios for the Middle East and North Africa. In all of the major regions of the world, the ratios steadily increased through at least the early 1970s. African levels were initially lower, however, and therefore did not climb to the same level as the other regions. Europe, North America and Latin America had relatively high levels from the beginning, and thus did not experience much change.

Figure IV. Primary Education Indicators for the Middle East and North Africa Region



Events such as the "oil shock" during the 1980s led to a major interruption in the upward trend. As Governments faced a levelling off of revenues, they had to make hard choices with respect to priorities. According to one study, these choices more often than not involved a reduction in real expenditures for education.[7] In over half of these countries, educational budgets declined in real terms, and in approximately a quarter of them, enrolment gains were exceeded by population growth. In several countries, the ravages of war, disease and famine also contributed to the setbacks.

With the levelling off or decline in educational expenditures, and also as a result of population growth and the increase in the number of school-aged youth, enrolment ratios tended to stabilize -- or even (in several cases) to decline. A recent UNESCO study indicates that over the 1980s period, enrolment ratios for the primary level decreased in 26 nations and showed no advancement in another 23.[8] This pattern of stabilization has continued into the 1990s, even as the world economy has begun to improve. The cross-national educational gaps that once seemed to be narrowing are thus a new area of concern.

A recent UNICEF-sponsored analysis of Africa proposed an initial breakdown of national contexts into three groupings. "Group A represents the group of countries with net enrolment rates below 50 per cent, B those with net enrolment rates above 50 but below 70 per cent, and C those with net enrolments above 70 per cent."[9] According to this analysis, the nations in Group A will require a different policy emphasis than those in B or C.

Girls and women are neglected. In virtually every region of the world, girls' education lags behind that of boys, and more women than men are illiterate. These disparities are most evident in developing countries (see figure V) and are particularly acute in those regions and countries with low enrolment ratios. Consider the following statistics:

- In 1990, about 130 million children had no access to primary school, of these, 81 million were girls.
- About two thirds of the world's estimated 948 million illiterate adults are women.

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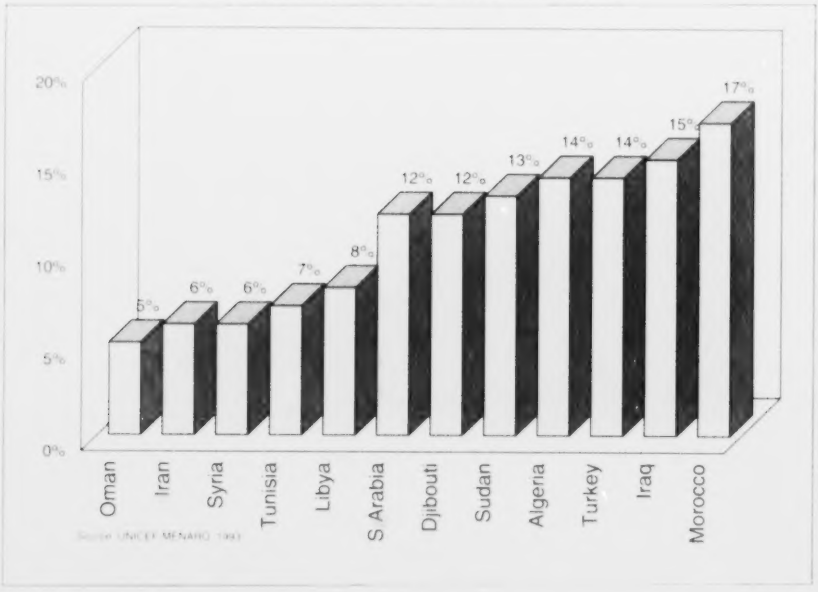
[7] Keith Lewin, Angela Little, and Christopher Colclough, "Adjusting to the 1980s: taking stock of educational expenditure," *in*: IDRC, *Financing Educational Development*, the proceedings of an international seminar held in Mont Sainte Marie, Canada, from 19 to 21 May 1982 (Canada, IDRC, 1982).

[8] Gabriel Carceles, "World literacy prospects at the turn of the century: Is the objective of Literacy for All by the Year 2000 statistically plausible?" *Comparative Education Review* 34 (1), (February 1990), pp. 4-20.

[9] Frank Dall, "Basic education: an investment in a better African future," *in*: *Africa's Children, Africa's Future: Background Sectoral Papers* (New York, UNICEF/OAU, 1992).

- In at least 29 countries during the period 1986 to 1989, less than 30 per cent of the women could read and write. In five developing countries, female literacy rates were lower than 10 per cent.
- In Sub-Saharan Africa, the gross primary enrolment rate declined from 77 per cent in 1980 to 71 per cent in 1985.
- Nearly one third of the children in the world who start first grade are likely to drop out before completing fourth grade.
- During the period 1986 to 1989, the gender gap in primary school enrolment was approximately 29 per cent in South Asia, 20 per cent in Sub-Saharan Africa, and 18 per cent in the Middle East.[10]

Figure V. Primary Education Indicators for the Middle East and North Africa Region



Rural areas are neglected. It should be kept in mind that aggregate national statistics are based on summations of local statistics. When national totals decrease, it is often the case that some areas decline faster than others. In the recent downward shift in enrolment ratios it turns out, at least for some countries, that the peripheral or rural areas have suffered sharper declines than have the central or urban areas.

[10] UNICEF, *Strategies to Promote Girls' Education: Policies and Programmes That Work* (New York, UNICEF, 1991), pp. 3-4.

In large nations, those in rural areas -- particularly if they are at some distance from the capital -- are most likely to be peripheralized. The Indian subcontinent (see box 4) is somewhat of an extreme case: in 1981, 67.3 per cent of rural young people in India aged 15-19 were illiterate compared with 34.9 per cent of urban young people; in nearby Pakistan, the difference was even more extreme, at 82.6 versus 53.1 per cent. In rural Pakistan, 92.7 per cent of rural females 15-19 years old were illiterate![11] While physical distance from the centre is a critical determinant of peripheralization, it is also often the case that large numbers of peripheralized can be found near the centre -- in shanty towns, townships, or, as in the United States, in urban ghettos.

Box 4
Primary Education in India:
A Situation Analysis

Despite the expansion of primary education under British rule during the preceding 130 years, only one child in three between the ages of 6 and 11 was enrolled in school around 1947; the rates of wastage and stagnation were very high, and the quality of education was quite uneven. This low start made the Constitutional injunction of elementary education an unusual challenge. It was perhaps easier to open more schools under government or semi-government auspices than to get children enrolled, or to make them attend and to achieve. The total enrolment in Classes I to V increased from around 20 million (about 38 per cent of the relevant population) in 1951 to some 80 million (about 84 per cent) by 1981. This "gross" ratio of enrolment was reported to have been over 97 per cent by 1988, with "over age" and "under age" accounting for the "grossness" reckoned at about 25 per cent. Though enrolment is not the same as education (or even attendance), changes in the ratios point to a trend: it seems to have moved faster in the 1980s than in the preceding decades. This trend is reflected in girls' enrolment as well.

The discrepancy between data collected by the Departments of Education and the data collected under the census is acknowledged. The *Fifth Educational Survey* (1988) gives the impression that the gap between enrolment and retention is declining. There are, however, problems with this impression. One problem is that some of the least literate States appear to be ahead of the traditionally more literate States in the context of children's retention in schools through the primary years. For example, the enrolment in Grades II and III as a percentage of Grade I is reported to be higher in Madhya Pradesh (MP) and Uttar Pradesh (UP) than in Tamil Nadu and Maharashtra; the significant number of students who have to repeat the same grade may possibly contribute to this picture. Under normal circumstances in the context of children's retention in the second and third primary years, one would classify MP or UP with Rajasthan, Bihar, and Andhra

[11] Gabriel Carceles, *op. cit.*, p. 17.

Pradesh. No radical or even modest reforms in MP or UP have taken place to raise them to the category of States where Tamil Nadu and Maharashtra belong.

Girls' enrolment as a proportion of total enrolment at the primary level increased from 17 per cent in 1950/1951 to 35 per cent in 1987/1988. However, the number of girls at the primary stage as a proportion of all girls in the relevant age group showed no significant improvement during the 1980s. In fact, the number of girls not attending school increased during that period, and has continued to do so. And despite the steady increase in participation, a vast majority of the scheduled caste and tribe girls remain out of school. Total absolute enrolment among girls is still low, and the gender gap -- even at the primary level -- has not yet begun to narrow. The educational participation of girls is substantially lower than that of boys in all States except Himachal Pradesh, the north-eastern States, Goa, Kerala and most of the Union Territories. This pattern is broadly reflective of the degree of gender equality prevailing in each State.

The pace of expansion has been unprecedented and has created problems of quality. In an earlier era, schools were organized on the initiative of local communities as a result of expressed demand; however, primary education has undergone linear expansion, largely under government responsibility or because of its aid. Of the several consequences that have ensued, one has been the increasing (absolute) number of children not making it to the next grade or dropping out of the system altogether or, linked to both of these, not wanting to be enrolled in school. This central problem has persisted, despite a steady increase in the proportion of children moving up from the primary to the next stage. This situation has been exacerbated by a number of other factors such as the bureaucratic culture pervading the educational system across the country, material poverty in the home, parental perceptions of the value of education, and social values regarding the role of women and the education of girls, which is perceived to be even "costlier" than that of boys. In fact, through the years of development and planning, warning signals have periodically come that the reality in the field of basic education has been at wide variance with the policy aims, and the backlog in the absolute number of children not receiving education has been increasing.

While a large proportion of children do enrol in schools, the high drop-out rate (as well as the low levels of achievement by those who continue in the system) is a major concern in primary education. It is estimated that over 50 per cent of the students currently drop out by the end of Class V. The Approach Paper to the 8th Plan puts the drop-out rate at 70 per cent between the ages of 6 and 14.

It has been computed that the number of 6- to 14-year-olds out of school increased from 29 million in 1966 to 48 million in 1978, and to 75 million in 1981. Of these 75 million, 65 million are in rural areas, and 37 million are rural girls. The rapid increase in the number of children of this age and low grade-transition rates have evidently complicated the task of

achieving policy goals. Most of the States with a relatively large concentration of their population in the 6-11 age group are also educationally backward, and have low levels of income as well as high dependency ratios (defined as the number of children 0-14 years per 1,000 persons aged 15-59). For rural areas, the proportion of children between 6 and 11 varies from 16.16 per cent of the total population in Bihar to 11.75 per cent in Kerala. The resource needs for quantitative coverage through expansion of the network of primary schools in the seven States of relative educational backwardness (Bihar, Rajasthan, Uttar Pradesh, Madhya Pradesh, Orissa, Andhra Pradesh and West Bengal) would be enormous -- to say nothing of the efforts required for the qualitative improvements necessary to ensure participation and achievement. There is evidence that, though education in government schools is free in that there is no tuition fee, many parents are not able to meet the private costs of education, not least the opportunity costs. According to age-specific literacy rates in the 1981 census, while the number of literates in the age group 5-14 grew by over 48 per cent between 1971 and 1981, the number of illiterates in this age group also grew by about 23 per cent (or 2 6 million).

It can be argued that the emphasis on mechanical literacy may be at the heart of the well-researched yet poorly understood problem of early elimination, better known as the high drop-out rate. The pre-literacy tasks children are required to perform in primary schools take too much time and energy during the first year of school and do not offer any immediate reward in the form of satisfaction in having read something worthwhile or interesting. This seems to prove frustrating enough for a large proportion of children, especially those lacking a reading environment at home, to grow indifferent to school and eventually stop attending it. The sharp difference between the enrolment figures for Grade 1 and Grade 2 given in the data justifies this view. The following table presents Grade 2 enrolment, expressed as a percentage of Grade 1enrolment in some of the States (Madhya Pradesh and Uttar Pradesh are omitted due to the doubtful reliability of their data):

Andhra Pradesh	64 9
Assam	55 8
Bihar	57 8
Gujarat	73 0
Kerala	77 9
Maharashtra	77 3
Rajasthan	47 6
West Bengal	56 3

According to the 1981 census, 97 million children in the age group 6-11 constituted over 14 per cent of the population. Computing from the census data the number and distribution of the children not attending school, only about 46 million children (aged 6 to 11) attended school, the overestimates of school enrolment in educational statistics notwithstanding.

Source: UNICEF, *Children and Women in India: A Situation Analysis* (India, UNICEF, 1990).

Some cultures fare better Somewhat independent of rural-urban variations are the disparities existing among distinctive regional cultures. As already noted, overall enrolment rates in India are comparatively low, especially in rural areas. However, in the State of Kerala, despite the primarily agricultural focus of the economy and the predominant pattern of rural residence, nearly all children enrol in the primary grades, and 88 per cent of the age cohort are enrolled in secondary schools. Kerala thus has a literacy rate of 70.4 per cent, or twice the national average.[12]

Two factors may account for the high literacy rate in Kerala. While the predominant religions in the Indian subcontinent are Hinduism, Buddhism and Islam, Christianity is predominant in Kerala, and the Church has long been involved in the education of youth. In addition, the Communist Party, which has a strong commitment to popular literacy, has often commanded a leading position in Kerala politics.

In many nations there are particular subgroups that place greater emphasis on education than do the mainstream groups. These subgroups have traditionally valued literacy as a means for appreciating their religious heritage, and now, in the modern period, rely on education as a means of social mobility: the Parsis of India, the Chinese throughout South-East Asia, the Jews in Europe, the Tamils in Sri Lanka, the Japanese in the Americas, and the Indians in Africa are notable examples. Thus, even within nations, there is not only a rural-urban split, but also important ethnic and cultural differences that require examination.

The Challenge: Focusing on the Under-served

One of the clearest lessons that has emerged from the past four decades of educational development is that modern educational systems are biased in favour of certain privileged groups and against others, particularly the following: girls, "the poor, street and working children, rural and remote populations, nomads and migrant workers, indigenous peoples, ethnic, racial, and linguistic minorities, refugees,"[13] "those displaced by war, and people under occupation."[14]

Modern schools are relatively effective in reaching out to the children whose parents participate in the modern sector. These parents have homes in densely settled areas where there are many schools nearby as well as public transportation.

[12] Myron Weiner, *The Child and the State in India* (Princeton, Princeton University Press, 1991), p. 175.

[13] Frank Dall, "Basic education as a child right: the challenge of implementation," *in: Innocenti Centre Occasional Paper Series*, No. 4 (Florence, UNICEF, 1993).

[14] World Conference on Education for All (WCEFA), held in Jomtien, Thailand, from 5 to 9 March 1990: *World Declaration on Education for All* (New York, Inter-Agency Commission: UNDP/UNESCO/UNICEF/World Bank, 1990), p. 5.

to still other schools. The parents follow daily schedules that facilitate their sending their children to school, and in the home are books, radios, and often even television, as well as parents who understand schools and much of what is taught in them.

As modern education attempts to reach outside of this privileged group to the rest of society, however, it often falters. The challenge facing the committed educator is to select educational initiatives known from experience to be effective in reaching out to the under-served, or to devise new ones if no such initiatives exist. This book is meant to help the educator who intends to respond to the challenge of reaching out and connecting with those children neglected by conventional modern schooling.

Towards a Strategic Approach

In the earlier decades of educational development, many initiatives were spontaneously developed, drawing upon hunch, inspiration, and the whims of well-heeled donors; some worked, but many did not. Today's conservatism in educational reform is one of the legacies of these earlier decades of failed experimentation.

An additional legacy, however, is the documented record of these experiments. Forty years of cumulative knowledge about educational initiatives has led to the development of certain principles. Initiatives that work do so because they fit their context. Drawing upon this cumulative experience, it is possible to develop guidelines linking particular initiatives to the nature of their context. This linkage is what is termed the strategic approach to educational reform.

Context. The first step in the strategic approach is to analyse the local context of the intended initiative. the UNICEF Comprehensive Education Analysis can often provide a useful background for this exercise (see box 5). In the contextual analysis, which is reviewed in chapter two, the educator focuses on the elements of the demand for and the supply of education.

Box 5
UNICEF Comprehensive Education Analysis

UNICEF has a two-part methodology for assisting Education Advisers in analysing the development needs and opportunities of an education system. *Comprehensive Education Analysis* is a systematic, detailed analysis of the entire education system that takes four to eight weeks to accomplish. *Situation Analysis* is a highly collaborative, longer-term, less formal strategy used to help refine issues within target areas of opportunity.

The purposes of a Comprehensive Education Analysis include the following:

- Establish databases and methodological models for improving the systematic planning for human resource development within a country.
- Identify the areas of most serious need and the constraints on the option for change.
- Specify particular areas where new allocations, or reallocations of present resources, can promote the most cost-effective changes.
- Provide a basis for long-term improvements in the planning, implementation and monitoring of human resource development.
- Provide a basis for advocacy for funds, for the mobilization of resources, and for policy change.

During a Comprehensive Education Analysis, all of the components of the sector (preschool, primary, secondary, vocational/technical, and higher education) are analysed in relation to each other and to the broader context of the country, especially the latter's economic conditions and capacity to manage the education sector. An objective of the Analysis is to encourage the use of relevant and current information for planning, policy formulation, and resource allocation.

The following four characteristics best describe Comprehensive Education Analysis:

- **Comprehensive.** The Analysis examines the entire education system, even if UNICEF activities are only to be targeted at selected subsectors. Only as the interrelationships among subsectors are understood can effective development activities within any one of those subsectors be planned.
- **Systematic.** Within an Analysis a common format is followed for the subsector chapters. Whenever possible, the same chapter outline is used for all countries. The common format across countries increases the probability of identifying problems common to all of them. It provides a basis for assessing whether interventions tried in one country would be appropriate in others. Further, it provides comparable data for designing regional activities to address problems common across a geographical region.
- **Participative.** The conduct of the Analysis requires the extensive participation of host country personnel in the entire process and intensive collaboration between government ministries and the Analysis team; local and expatriate experts work together on this team, helping to identify sources of data, reviewing drafts of all chapters, and discussing recommendations.
- **Data-based.** The Comprehensive Education Analysis is built on the collection and synthesis of data already available within a country. These data are gathered from published and unpublished reports

and interviews with people knowledgeable about the education sector. This sometimes involves working from data of a low or unknown quality. The advantage of this approach, however, is that any subsequent discussions with the Government about recommendations are grounded in the Government's own data. Disagreements about conclusions and recommendations can then be based on disagreement over the substance of what is being recommended rather than over the acceptability of the data on which the recommendations are based.

The Comprehensive Education Analysis Process

Deriving a final set of defensible conclusions and recommendations requires adherence to an analytically sound process, which involves the following eight steps:

- **Preparation.** The first step in any complex process is preparation; requirements for the Analysis include preparing the terms of reference, clarifying what work is expected, arranging local logistics, and organizing the budget.
- **Data collection.** Comprehensive Education Analysis is only useful when it is based on current and relevant information. Data collection is an important first part of the process, and involves gathering available information but generally not the conduct of basic surveys. Team members have to use both published and unpublished data and documents, which should be supported by interviews with individuals knowledgeable about education. Although most of the data collection will be done at the beginning of the Analysis, some will continue throughout the study period. Data that are more current sometimes become available near the end of the Analysis and should be included to the extent feasible, particularly if they are significantly different from earlier information.
- **Data analysis.** Once the data are gathered they can be analysed, which means that they can be organized and examined critically for their interpretation. For example, if enrolments are decreasing each year while the number of school-age children is increasing over the same period, it suggests that further investigation of this situation is needed. The point being made here is that merely collecting available data is not sufficient for an Analysis.
- **Identification of issues and constraints.** Analysis of the data will identify both the strengths and weaknesses of an education system. These can be described with regard to the data from a single subsector alone or in relation to the economic analyses and data for other subsectors.
- **Conclusions.** The conclusions summarize the results of the Analysis, and must be based on the data and their analysis. Conclusions

should not merely represent the opinions of a team member or of an influential member of the education sector.

- **Recommendations.** The recommendations provide options for addressing any problems or concerns identified through the analytical process. In addition to the set of prioritized recommendations to reach the subsector, it is very important to have a synthesis which gives recommendations, also in order of priority, for the entire sector.
- **Review.** Among the characteristics of the Comprehensive Education Analysis that make it different from the assessments conducted by many other groups is the emphasis on developing the draft of each chapter in the field and conducting formal reviews of those drafts with the entire team and with the Interministerial Review Committee. Frequent and careful reviewing of the Analysis during its development is an important part of the process. The reviews by the Interministerial Review Committee should be carried out not only at the end of the assessment but also during the process, as this provides an opportunity to ensure that the data and their interpretations are correct; it also helps to ensure that key government personnel understand the findings and recommendations of the Analysis.
- **Revision.** Based on the review process, there may be a need to correct or amend portions of the Analysis. At the end of the Analysis it is important to make final changes that reflect the most accurate data and interpretations.

Source: UNICEF, *Training Resource Manual for a Flexible Training Program in Comprehensive Education Analysis* (New York, UNICEF, 1992).

Priorities The second step in the strategic approach is to assay priorities, both as perceived by local leaders and as can be inferred from objective observation of the situation. In chapter three, drawing upon the Jomtien dialogue, five likely priorities are identified: access, equity, learning acquisition, relevance, and efficiency. These priorities are shaped by the context; for example, access and equity priorities are most likely to appear in a context of short supply, whereas inefficiency is more common in a context of full supply.

Components of educational initiatives Experience with educational reform makes it clear that many past efforts have failed because they have been too narrowly conceived, focusing on only one component such as textbooks, teacher training, or school management, with a failure to consider the ramifications of this limited intervention for other components. The implication is that effective intervention involves a package of integrated components; the third step in the strategic approach is to identify the contents of this package. Chapter four presents, in outline form, the full range of components that an educator might

draw upon. Chapters five through seven provide illustrations of the way these components can be combined to respond to different context-priority combinations.

Implementation. Designing and launching a promising initiative is an important beginning to educational improvement. However, many initiatives fail because the reformer pulls back once the initiative leaves the design room. It is only at this stage that the hard work begins. Perhaps the greatest challenge in educational improvement is that of seeing a good initiative through to full-scale implementation in the face of countless obstacles.

The strategic approach builds on cumulative experience, but this does not mean it is backward-looking. Rather, the aim is to outline a pattern of thinking that can help in planning for the future. It should be noted that the order and language of the following chapters closely parallel those found in the UNICEF *Policy and Procedure Manual for Programme Operations*.

The Comparative Advantage of UNICEF

From its inception, UNICEF has championed the humanistic approach to development. The UNICEF Charter highlights the concern with developing the "whole child", and throughout its history, UNICEF has searched for innovative strategies to accomplish this mandate. In its early years, UNICEF was an emergency relief agency focusing on child health and nutrition, on maternal and child care, and on dealing with the severest forms of child distress in the war-torn Member States of the United Nations after the Second World War. In view of these priorities and the temporary nature of the agency, education was not a programme element. However, once UNICEF became a permanent agency and began to broaden its geographic coverage, it started to recognize that issues of child health and nutrition could not be divorced from other areas of child development, including education. This recognition gave rise to the *whole child* philosophy, and some preliminary exploration of involvement in the education sector.

The initial involvement of UNICEF was closely coordinated with UNESCO and primarily resulted in the funding of teacher training, selected curriculum and textbook projects, and some non-formal literacy and school facilities projects. In the early 1970s, UNICEF began to re-examine these efforts, and concluded that they mainly benefited secondary education and older children, while the core concern of UNICEF was with the young child -- particularly the female child. UNICEF also came to a greater appreciation of the distinctiveness of its approach (see below) relative to that of UNESCO or the other multilateral agencies.

- A clear commitment to serving the basic needs of children.
- A decentralized pattern of organization, with primary attention given to the priorities of host countries rather than to the dictates of a central planning bureaucracy.
- Flexibility in local programming.

These distinctive features placed the organization in an advantageous position for addressing the challenge of basic education. However, throughout the 1980s, UNICEF avoided undertaking a major initiative, believing it could better use its scarce resources to realize other priorities.

Now after Jomtien, however, UNICEF is poised to devote increasing resources to basic education. Not long after the Jomtien Conference, UNICEF convened the World Summit for Children, which reaffirmed "the right of the child to education" and stressed the importance of specific measures for early childhood development, basic education, adult literacy, vocational training, and the enhancement of all educational channels.[15]

By the year 2000, UNICEF expects to increase its allocation for education from the current level of 9 per cent to 20 per cent of its total expenditures. In keeping with this goal, many new positions are being established for Education Officers in the various national offices. Educators around the world are now looking to UNICEF to place its distinctive imprint on the EFA initiative.

Towards a More Integrated Global Approach

The priority. The UNICEF mandate -- to help protect the lives of children and promote their development -- cannot be fulfilled without education. Education is decisive in every child's welfare, it remains a fundamental human right and is the single most important tool for social and economic development. Education, like health and nutrition, is a matter of life and death.

The policy. The absence of acceptable-quality primary education remains a serious problem in most parts of the developing world. UNICEF encourages a broad vision of basic education and has selected universal primary education (UPE) as the priority for its EFA efforts, with girls and women as special target populations. Early childhood development and adult education serve as supporting strategies, though the relative emphasis and combination of activities will vary from country to country.

The educational goals. The 1990 World Summit for Children, in its plan of action for the survival, protection and development of children, set the following basic education goals for the year 2000:

[15] UNICEF, *World Declaration on the Survival, Protection, and Development of Children*, held in New York from 29 to 30 September 1990, and the "United Nations Convention on the Rights of the Child", *in: The State of the World's Children, 1991*..., pp. 51-96.

- Universal access to basic education and the completion of primary education by at least 80 per cent of primary-school-age children
- Reduction of the adult illiteracy rate to at least half of its 1990 level (the appropriate age group to be determined in each country), with emphasis on female literacy

The mid-decade (1995) goals were established as intermediate milestones for progress towards the decade goal of basic education for all. These goals are to reduce the following gaps by one third

- Primary school enrolment and completion rates in 1990 (specifically, these goals include universal enrolment, and the completion of primary education by at least 80 per cent of school-age children)
- Primary school enrolment and completion rates for boys and girls in 1990

The mid-decade goals focus on the achievement of UPE, recognizing that the most effective approach for tackling illiteracy is to make primary education universal and effective

Primary Education: The Heart of Basic Education

> *The main delivery system for the basic education of children outside the family is primary schooling. Primary education must be universal, ensure that the basic learning needs of all children are satisfied, and take into account the culture, needs, and opportunities of the community. Supplementary alternative programmes can help meet the basic learning needs of children with limited or no access to formal schooling, provided that they share the same standards of learning applied to schools, and are adequately supported* [16]

If all children had access to a good-quality and relevant primary education, over time adult literacy programmes would be almost unnecessary; neither would there be the tremendous gap that prevails between male and female educational levels, nor the massive phenomenon of repetition that characterizes educational systems worldwide. Furthermore, research has demonstrated the positive effect on development that results from investments in education, i.e., smaller families, improved health, increased income, increases in the age of marriage and child-bearing, child spacing, increased agricultural productivity, and improved nutritional status

[16] World Conference on Education for All (WCEFA), held in Jomtien, Thailand, from 5 to 9 March 1990. *World Declaration on Education for All* (New York, Inter-Agency Commission, UNDP/UNESCO/UNICEF/World Bank, 1990).

The above explains why participants at the Jomtien Conference defined primary education as the "cutting edge" of basic education and as the principal means for children to have access to it.

Achieving UPE: Key Considerations

UPE is a major development challenge in many of the developing countries and is the main goal for UNICEF in this decade. Reaching this goal implies the formulation of strategies reflecting some key considerations, including the following:

- **Adopting a systemic and holistic approach to basic education and development.** Basic education activities must be considered in their entirety so that improvements to the system may be made in ways that complement and supplement existing parts of the system. Basic education must be linked to other areas critical to children's and women's well-being such as health, sanitation, nutrition and the environment, because education is a key factor in overcoming the three main problems facing the world today: poverty, population growth, and environmental deterioration.

- **Building a unified but diversified primary education system.** The formal school system, by itself and as it is, cannot cope with the UPE task. Alternative and complementary approaches must be included, adapted to the needs and circumstances of those unreached or poorly served by regular schools. Working towards a unified system, where *unified* does not mean *uniform*, is a must if the UPE goal is to be reached.

- **Expanding while improving.** Reconciling quantity with quality has been a dilemma of education systems worldwide. The experience and knowledge gained in the last three decades show the need to see quantity and quality not as options or sequential stages, but as two sides of the same coin. Countries which have accelerated expansion without regard for ensuring an acceptable standard of performance of schools have found that mere expansion results in wasted educational investments. It is essential and possible to achieve both quantity and quality simultaneously.

> *If empowerment of people through knowledge is an important goal of basic education, then there is a strong case for "affirmative action" in support of expanding basic education for girls and women, the victims of age-old discrimination in most societies. This is an article of faith for UNICEF, because we know from our own experi-*

ence that all the gains that have been made in the past decade in saving the lives of millions of children and improving the health and well-being of children and mothers cannot be sustained and cannot be advanced further without primary education, literacy and basic knowledge for better living for girls and women [17]

- **Focusing on female education.** Girls constitute the majority among those systematically excluded from primary education opportunities Reducing the gap between boys and girls in enrolment and continuation in school is therefore critical within the UPE thrust Girls need to have not only equal opportunities to enrol but also equal learning conditions, free of stereotypes and discriminatory values and attitudes Specific measures and strategies sensitive to girls' and their families' needs and expectations and adequate to each particular context and culture need to be identified and developed
- **Starting early with parents and the family.** Learning begins at birth and continues throughout the life of an individual Care, attention, and affection in the early stages of life determine, to a great extent, the very possibilities of a child in both the intellectual and the affective spheres Relevant early childhood development programmes are necessary to compensate for the deprived family and community environments of many children While institutional preschool programmes and early-childhood programmes are not a priority until primary school opportunities are widely available for children, health and nutrition needs of children must be met, a stimulating and caring environment is essential, and parents and care-givers need to have the knowledge and skills to promote and protect the normal growth and development of the young child
- **Making adult education an important supportive strategy.** Adult literacy and basic education, parenting education, and teacher education are the keys to children's education, the quality of learning, and the quality of life Children depend on adults -- parents, relatives, care-givers, teachers, policy makers -- and their decisions Effective participation in education by parents and communities requires that they have basic information, knowledge and skills The emphasis needs to be on expanding the opportunities and channels of information and communication for the whole society and on well-targeted and well-planned adult basic education programmes rather than isolated and one-shot literacy interventions

[17] James P Grand, the late Executive Director of UNICEF

Strategies for Attaining UPE

A few basic principles of operation that have proven effective in implementing basic education activities in many developing countries are summarized below

UPE implies achieving several strategic objectives

- Increasing enrolment and completion rates
- Reducing gender disparities in enrolment and completion
- Increasing the proportion of enrolled students achieving acceptable levels of learning

These strategic objectives can be attained by action in the following areas

- **Revitalization of the primary school network.** The primary school infrastructure reaches most children in most countries, but it often fails in helping children to acquire essential learning skills and relevant life skills. A revitalization of primary schools requires innovative and pragmatic solutions. Current efforts include decentralization and the enhanced authority of parents and communities, support for principals, holding principals and teachers responsible to the community for the performance of the school, multi-grade classes when necessary, new approaches to teacher education and training, and the provision of essential learning materials.
- **Targeting the difficult-to-reach groups through complementary non-formal approaches.** The common essential features of successful non-formal primary education programmes include the following: para-teachers from the community, short initial training and strong supervision for teachers, a small catchment area for schools, active community and parental involvement, a simplified curriculum focusing on essential knowledge and skills, provisions for essential learning materials, no or minimal capital costs, and partnerships between non-governmental organizations (NGOs) and the community. Strengthened mosque and church schools, other indigenous learning modalities, and traditional education institutions also play an important supporting role in attaining UPE.
- **Emphasizing and monitoring learning achievement.** Access and enrolment are not enough to guarantee UPE. Conventional examinations measure rote learning rather than cognitive achievement and actual applicability of the new knowledge and skills to real-life situations and problems. A simple method of assessment of learning must introduced as a part of the basic management information system (see box 6)

Box 6
Monitoring Learning Achievement

UNICEF and UNESCO are working together to develop and introduce a system to monitor learning achievement. The aim is to assist countries to develop tools to assess learning achievement and to improve the database for monitoring learning. Monitoring projects have been started in China, Jordan, Mali, Mauritius and Morocco, and other countries are being selected for a second phase. A complementary UNICEF-UNESCO project aims at developing and applying a technical assistance package for national capacity-building in the compilation and analysis of educational statistics for monitoring progress on primary education and data analysis in five pilot countries. At the end of the project, the package and technical assistance services will be available for wider dissemination and implementation.

Source: "Joint UNICEF-NCERD-UNESCO Regional Seminar on Monitoring Learning Achievement", held in Amman from 23 to 26 July 1994 (final report).

- **Enhancing national and local capacity.** Competent human resources at all levels -- teachers, administrators, planners, and researchers -- are as important as financial resources in educational development, and are the key to the quality and sustainability of efforts. Capacity-building is therefore a very high priority. Capacity-building activities must address both short-term and long-term objectives. In the short term, well-conceived training plans must be developed and implemented. In-country institutions with mandates relevant to the educational task must be supported and/or developed with a view to the longer term. UNICEF has a cooperative programme with the International Institute for Educational Planning (IIEP) for supporting national capacity-building in respect of decentralized planning and management.

- **Establishing local area-based planning, management and monitoring for UPE.** A unified UPE programme with diverse formal and non-formal approaches serving all eligible children can be effectively planned and implemented only if the planning and decision-making are done locally and are supported by appropriate policies and technical guidance, with the active participation of parents and others who can contribute. A local information base through simple educational mapping, a system of reporting enrolment and retention, and a simple system of learning assessment are important requirements for effective UPE planning and implementation.

- **Strengthening popular participation, social mobilization and public monitoring.** People's participation and mobilization are essential

in achieving Education for All. The concept of participation needs to embrace the active involvement of parents and communities in the fundamental decisions and actions affecting their own and their children's education. Social mobilization needs to be understood as a sustained process and a broad-based social movement devoted to a specific common goal. Frequent and regular monitoring and reporting of progress towards UPE at national, intermediate and local levels with the participation of public and government leaders can be a powerful means of social mobilization.

- **Determining priorities for complementary elements.** When large numbers of children are without adequate primary education programmes, most of the resources and efforts have to be devoted directly to improving and expanding these programmes. Low-cost approaches to enhancing the child's growth and development and expanding the knowledge and skills of parents related to their role in helping the young child develop and learn can be an important complement. Adult basic education programmes, including those concerned with adult literacy, can be focused on adolescents and youth. Country-specific sub-targets and strategies have to be identified to help achieve the main UPE goal.

- **Identifying and disseminating relevant information on successful experience.** All countries have inspiring experiences and processes which show that change and success are achievable. Identifying, systematizing and disseminating these experiences are important in order to learn from good practices, build on what exists, and avoid "reinventing the wheel". In order to collect, analyse and promote innovative basic education experiences in the developing world, UNICEF and UNESCO have joined hands in the project "Education for All: Making it Work". The project, started in 1991, has three components: a videobank, a series of publications, and regional and subregional workshops aimed at experience-sharing and capacity-building.

Special Initiatives

UNICEF recognizes the enormity of the EFA task and the need to target its activities carefully in order to achieve success. Three initiatives designed to meet specific EFA challenges are summarized below.

The Nine High-Population Countries Initiative (E-9 Initiative). Half of the world's population, 70 per cent of the adult illiterates and about 70 million children excluded from primary education live in the following nine countries:

Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico, Nigeria and Pakistan. Education for All cannot be achieved without a breakthrough in these countries.

At the New Delhi Education for All Summit of the Nine High-Population Countries (13 to 16 December 1993), the nine countries committed themselves to intensifying their national efforts and sharing experiences. They decided that their education ministers as well as their heads of State would meet from time to time and collectively review their progress. The E-9 Initiative has already contributed to strengthening the political, financial and social forces that support basic education in these countries.

The focus on EFA in Africa. In the early 1960s less than 20 per cent of African children were in school. This number has more than tripled in most countries, signalling unprecedented growth. Yet some 40 million children in Sub-Saharan Africa are still deprived of primary education, and the number will grow to over 52 million by the end of the decade if the current trends continue. Enrolment rates are going down, and repetition and drop-out rates are increasing in some countries. Many of those who manage to complete the primary cycle do so under circumstances that do not permit children to acquire basic knowledge and skills. The African reality presents a very complex situation, and heterogeneous groups of countries are calling for thoughtful, fresh, and tailor-made approaches and strategies.

In response to the huge challenges facing African education, UNICEF is proposing (in collaboration with its Jomtien partners) an initiative to support and strengthen basic education in Africa and to help African countries meet their EFA goals. *The purpose of this programme is to launch partnerships between countries and interested external organizations which will allow them to work together to identify why and how the education system is failing and to implement location-specific activities to reverse the current negative trends.* This will require a speedy analysis of specific constraints to educational development and a well-thought-out plan of action to overcome these constraints on a case-by-case basis.

Education in emergency situations. Education must play a part in every emergency programme because education plays a key role in maintaining stability and helping people move from emergencies towards normality. UNICEF is devoting resources to refining educational programming in such circumstances.

UNICEF country offices need assistance in designing education programmes that can be quickly adapted to emergency situations, and in supporting the rehabilitation of education programmes and their transition to operating under

normal circumstances UNICEF is currently developing policy and related programming guidelines to support field activities In addition, flexible "edukits" consisting of learning/teaching materials for facilitators and learners in different types of emergency situations will be available for rapid response to emergencies

Chapter Two

THE CONTEXT OF EDUCATIONAL DEVELOPMENT

John Dewey once defined education as "intended experience". as such, education encompasses a wide variety of learning experiences. However, in this strategic analysis, the focus will be on that part of intended experience which takes place in identifiable *structures* and is influenced by an objective *context*. This chapter seeks to clarify some of the key elements of context and structure.

Educational context, a key component in Comprehensive Education Analysis, is shaped by the interaction between the actors involved in the educational enterprise and their environment. the first consideration in a Comprehensive Education Analysis should thus be an analysis of the key actors. An early section of this chapter provides a generic overview of the key actors, to be supplemented by more detailed exposition in subsequent sections.

The interaction of the key actors can be summarized in terms of two converging processes -- respectively, the *demand* for education and its *supply*. In most countries, the Government is the major provider of supply, though other actors are involved, including donors. Demand is usually thought of as deriving from children and their families as they consider the relative merits and demerits of time spent pursuing education, however, it will be suggested here that the actions of Governments and other agencies also have a strong influence on demand. So, while these two elements can be analytically separated, in the final analysis there is considerable overlap.

The main focus in this chapter will be on these contextual factors. However, the actual structures for the delivery of education, as well as the outcomes of these structures, can be viewed as flowing from the interaction of these two components. Hence, in anticipation of later chapters, preliminary definitions concerning key aspects of structure and outcomes will also be provided.

I. The Key Players in the Educational Context

Central and local governments and donors are the principal architects of the language of strategic planning, but they are not the only actors involved in the educational process. others participate and are hence affected by these plans. The language of strategic planning may acknowledge other actors and many of their interests, but this language does not necessarily accommodate either the actors or their interests. Who are the actors, and what are their concerns? A brief survey is provided below to establish a perspective for interpreting the interplay of supply and demand.

National Governments Historically, national Governments have been the most vigorous proponents of systematic educational planning in developing countries. Their concern is to shape a system that fosters loyalty to the national leadership, supports national defence, and contributes to economic development. National Governments command limited resources, and seek to distribute these in a rational and efficient manner among various programmes -- one of which is education.

Donors Various multilateral and bilateral agencies have developed an interest in primary education. Most view education as a key element in economic progress, but each agency has its distinctive viewpoint. Some think girls' education is the key, while others believe more stress should be placed on vocational skills or on preschool education. Still others urge improvements in the teaching of a particular foreign language. These donors typically deal with the representatives of national Governments, providing substantial assistance in exchange for recognition of their priorities in the national programmes. In favouring national Governments, they subtly erode the position of other actors.

Local governments and communities National Governments are formed through the consolidation of local communities with their distinctive governments and traditions. Where national Governments are strong, they seek to direct these local governments to promote the goals of the centre; national Governments may assert the right to appoint local officials, thus potentially distancing local governments from their communities. Local governments may be asked to contribute a certain share of the educational budget as a condition for receiving central funds. Local governments enjoy some discretion (the degree varies widely by nation and also within nations according to the relative assertiveness of the local unit) to promote their own priorities, which may include the perpetuation of a distinctive culture or a traditional political elite. In some polities, notably those influenced by the Anglo tradition, the level of local discretion may be extensive, with local governments enjoying considerable autonomy to set their own priorities as well as the responsibility for collecting their own funds. In these "decentralized" polities, local governments become the foci for strategic planning.

Cultural organizations Before the rise of governmental interest in education, cultural organizations were the main promoters of formal education, and in many nations they continue to be the sponsors of a significant proportion of the schools. These cultural organizations view schools as a vehicle for transmitting their particular values to children; often these cultural organizations and their schools build close links with local communities to the point that the interests of the two are virtually indivisible. The school and church or mosque are located on the same premises, using land donated by community members,

however, national Governments usually require these independent schools to follow a curriculum based on priorities determined by governmental authorities who may or may not have consulted the independent schools

Teachers and principals Teachers and principals are the front-line actors in national educational strategies, but they are rarely consulted in the development of these plans The front-line educators are portrayed as "professionals" who are committed to the ambitious educational goals of these plans -- but these educators are also "workers" who prefer autonomy over their work routine and seek a living wage, an opportunity to get ahead, and a decent life

Employers One of the most prominent rationales behind the commitment to educational expansion is the cultivation of a more productive workforce In preparing plans, Governments carry out studies on the needs of employers, but in most instances do not set up a meaningful mechanism for consulting with them Similarly, on the local level, employers may have little contact with schools, so gaps may emerge between the needs of employers and the education and training provided in schools These problems are more evident at the secondary level, though they may have implications for primary education

The family and the child Primary education is certainly intended to help the family in raising a healthy and happy child and in teaching the skills and knowledge required for a productive life While families may appreciate the value of formal education, they may also think of their children as resources for simple tasks in family businesses or on farms, or as assets to exchange through marriage Parents may have reservations about what transpires in schools or about the timing of school schedules, but one should ask whether they have the opportunity to express these concerns or to influence the school programme

The child Much educational discussion tends to subsume the child in his or her family, positing a common interest Yet in many families, the child is a resource more to exploit than to develop, in other instances, the child may have no family or at best a limited family consisting of a single parent and/or siblings While a child may not be able to articulate his or her concerns, it should not be assumed that the parent (or for that matter any of the other actors noted here) always has the child's best interests at heart

II. The Supply of Education

From a policy perspective, those actors who supply educational services provide the major key to meeting the goals of EFA They can be either more or less flexible in identifying popular needs or the demand for education, and in structuring responses to these needs or demands

In some nations private or religious groups play an important role in supplying education, either with or without government support. However, in most nations Governments play the primary role in providing basic education, either directly or through the provision of subsidies to the private sector.

While Governments have great hopes for education, their policies for supplying the educational services to realize these goals vary widely. The following are some of the factors that seem to bear on government policy for both schools that are publicly supported and those in the private sector. The particular focus here will be on those policies oriented towards reaching the under-served or peripheral groups that are the focus of EFA.

Conventional Indicators of Government Effort

Government policy starts with the Government's control over financial resources; these resources enable Governments to build the buildings, recruit the teachers, and acquire the materials necessary for supplying educational services. Conventional handbooks of national indicators identify several indicators of government financial capacity *vis-a-vis* education, the most important of which are listed below.

Educational expenditures as a percentage of GNP. Perhaps the most common indicator is total government educational expenditure as a percentage of gross national product (GNP). The presumption is that the more a Government spends on education the better.

The level of effort made by the different nations varies widely. According to the UNESCO *World Education Report* for 1992, some of the poorest nations of the world spend barely one per cent of their GNP on education, while Malaysia and Saudi Arabia spend nearly 10 per cent! There are some problems with this indicator, however. For example, some national accounts do not take adequate stock of the expenditures of local governments, and in virtually all government accounts the expenditures of the private sector are neglected. Thus, these statistics can reflect significant underestimations of effort in some contexts, most notably those contexts where there is a significant level of non-conventional support for education.

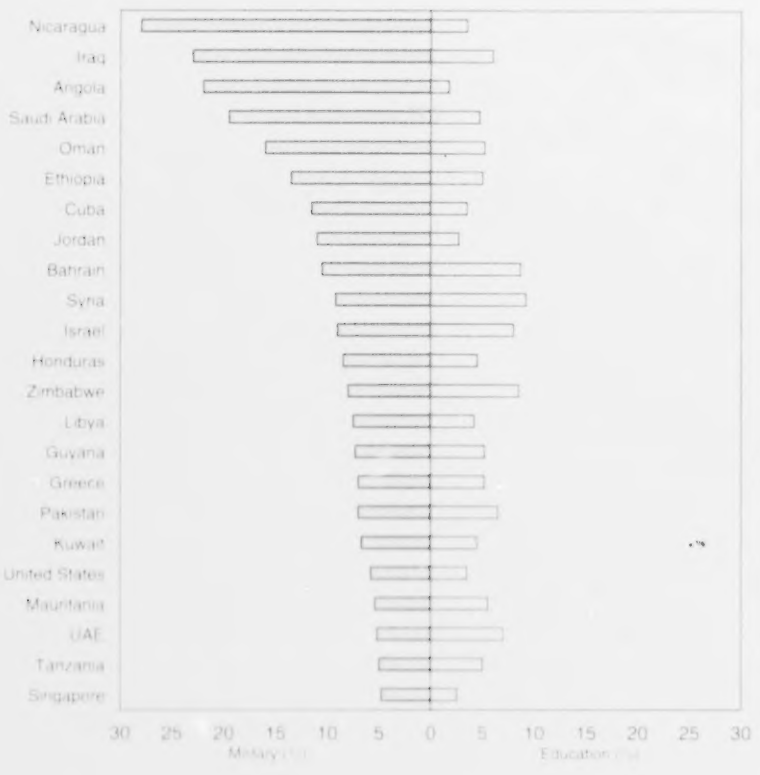
These limitations notwithstanding, it can be noted that more developed nations tend to spend a larger percentage of their GNP on education, and nations that spend more tend to have more developed educational systems -- but these connections are weak. Of particular interest is the tendency of Asian nations to spend relatively less money and get relatively better results.

Educational expenditure as a percentage of total government expenditure. As noted in chapter one, a number of nations over the past several years

have actually decreased their educational expenditure as a percentage of GNP. This decrease is typically due to increasing levels of national debt, and less typically to increasing emphasis on other national priorities such as defence (see figure VI). While education's fate in national and local budget deliberations may wax and wane, nations that spend over one fifth of their public budgets on education can be said to have a serious commitment to education; allocations of less that 15 per cent reflect a weak commitment (see figure VII). As with the previous category, it is possible that a nation's expenditures can be underestimated because local government expenditures are undercounted.

Figure VI. Military vs. Educational Expenditure as a Percentage of GNP, 1989-1990*

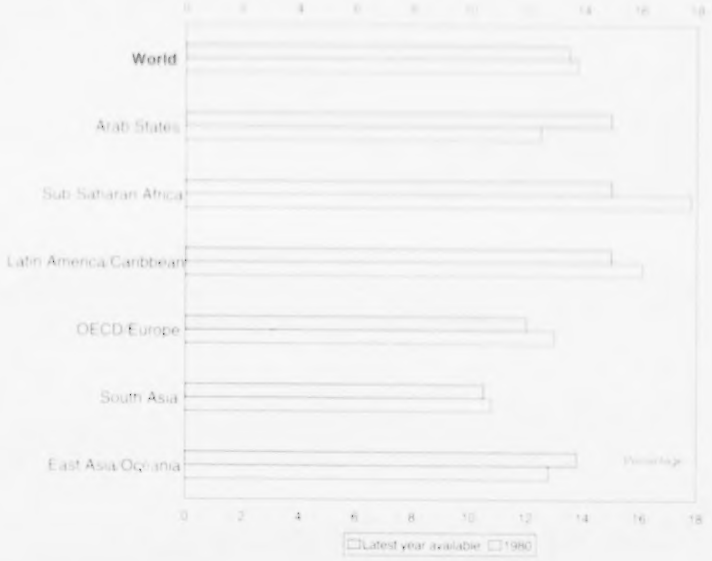
FOR COUNTRIES DIRECTING FIVE PER CENT OR MORE OF THEIR GNP TOWARDS MILITARY SPENDING



Source: UNDP, Human Development Report 1992, New York, UNDP, 1992.

* And for which data on educational expenditure is available.

Figure VII. Public Expenditure on Education as a Percentage of Total Government Expenditure (1980 and the latest year available)



Source: UNESCO, *Statistical Yearbook* (various issues, 1980-1992), (Paris); UNDP, *Human Development Report 1992* (New York: UNDP, 1992).

Primary education or basic education as a percentage of national educational allocations While national budgets have to focus on various priorities along with education, the national commitment to basic education is reflected in the proportions of the educational budget directed towards the different educational priorities. Some nations devote large and ever-growing proportions to tertiary education -- even up to 80 per cent of their educational budgets. Nations that have a serious commitment to primary education allocate at least one quarter of all educational expenditures to this level.

Government structure The conventional indicators described above are a first step in understanding the Government's approach to supply, but they may not adequately reflect the situations of national educational systems which rely extensively on locally or privately sponsored schools. A recent study finds that a significant minority of contemporary nations, including many of those less developed, rely extensively on such sponsorship. The present study identifies six major patterns of educational sponsorship -- i.e., Continental, Lowland, Japanese, Socialist, English, and American variants (summarized in table 1).

Table 1. Institutional Characteristics of the Principal Historical Models

	Centralized				Decentralized	
	Continental	Lowland	Japan *	Socialist	United Kingdom	United States
Number of political levels	1+	2	1+	1+	2+	3+
Percentage of public funds from the centre	50	100	100	100	20	10
State subsidy for the private sector	Low	High	Low		High	None
Percentage of private funding at the primary level	5+	50	1		10	15
Percentage of private funding at the secondary level	5+	50	40		10	15
Constituency for private schools **	R	R	A		E	R

Source William K. Cummings and Abbey Riddell, "Alternative policies for the finance, control, and delivery of basic education", HIID Development Discussion Paper No. 422 ES (May 1992)

* The Japanese model here was developed through the Second World War. After the War, under the auspices of the United States Occupation, the Japanese adopted a shared-funding reform.

** R = religious, A = academic, E = class

Note " " = Not available

The public sector The first four patterns in the table above tend to be thought of as *more centralized* and the last two as *more decentralized* insofar as the focus on government effort is concerned. However, even within the centralized group, some nations rely solely on central government funds, while others divide public responsibility between the central and local levels.

The private sector Similarly, even within the two broad decentralized groups the governmental role in non-governmental educational efforts varies. For example, the British pattern typically involves more extensive State subsidy of private efforts, whereas the American variant tends to de-emphasize public subsidies.

These structures have historically led to differential responsiveness with respect to the challenge of educating children in peripheral areas. The Japanese polity may be the most responsive to the periphery, simply because it does not acknowledge class, ethnic, or geographic differences. Socialist structures rank second in terms of attentiveness. The decentralized structures, while having the potential for incorporating various social and ethnic interests, are often dominated by a single ruling group, and thus seem to be the least attentive.

Comparing efforts by structural pattern. Relative attentiveness to supplying education to peripheral areas is expressed through the policies that flow from these structures. One simple indicator measures the relative equity in government expenditures by region and subregion down to the operational units for the delivery of social services.

The more centralized systems tend to do better in terms of cross-regional equity, primarily because they develop national formulas for the provision of educational services that are virtually uniform for all locations. An analysis of Japanese educational expenditures indicates that there is no more than a 30 per cent difference in per-student expenditures for the lowest funded and highest funded provinces (47 provinces).

Interestingly, the strongest correlate of high per-student expenditures is provincial population decline; for example, in Japan's more economically depressed provinces, parents and their children may leave for more affluent areas, but the public school system is not able to dismiss the teachers who were responsible for these children; the remaining children thus enjoy comparatively favourable access to their teachers. Centralized socialist nations also do well in terms of equally serving the various regions.

While the Japanese and socialist Governments are relatively more attentive to reaching out to the periphery, it can be argued that even they are deficient. The modern State, whatever the pattern, is ultimately committed to serving the centre.

The Role of the Community and NGOs

Prior to the emergence of the State as the principal supplier of education, schools and other educational facilities and experiences were provided by local groups, religious groups, communities, educators and other non-governmental entities and organizations. As suggested above, these sponsors continue to be a major force in some national settings, especially Africa, and it is likely that they will become even more prominent as the EFA movement advances. The above discussion of the private sector provides an indication of the relative prevalence of these efforts at the cross-national level. Later, chapter five focuses on specific ways in which educational leaders can capitalize on the energy available in NGOs for improving the supply of education to under-served groups.

III. The Demand for Education

Economists treat demand as the price that consumers are willing to pay for a certain volume of goods or services. One important consideration is personal taste. Demand for a particular service such as education competes with other demands. When the price of education is reasonable relative to the perceived benefit(s), children will go to school and will try to learn.

Much of the technical analysis of demand focuses on aggregate demand, assuming a geographically broad-based market and perfect information. Many of the arguments summarized in this and in the previous chapter focus on the aggregate or national level, for example, the Educational Impacts Model cited in chapter one draws on cross-national indicators.

Most particularly in the case of education, however, it is important to go beyond these aggregate comparisons and look within nations. It can be argued that the educational market-place, particularly at the level of basic education, is a highly localized phenomenon. Children can only go a short distance from their homes to seek basic education, so even if they or their parents know of other schools some distance from home (which is unlikely), these are not relevant options. Even if they have the required information and are physically able to go, they might find rules prohibiting them from attending. Further, the prices of the various options might be determined some distance away by a faceless public authority rather than by the local market.

These contrasts to the free market are especially relevant in the rural and peripheral areas, where EFA is so problematic. It therefore takes a considerable leap of faith to rely on cross-national indicators when searching for a practical strategy for EFA. The rationale here for introducing the cross-national indicators is that they allow for the illustration of a logical analysis that can then be pushed downwards within a particular national context to look at cross-regional contextual variation. While these indicators are chosen because of their impact on demand, it will also be evident that most are also related to supply.

Cross-National Indicators of Demand

Geography. Possibly the most powerful force associated with strength of demand is national scale. In large nations, as mentioned before, those in rural areas some distance from the capital are most likely to be peripheralized. The example was given of the Indian subcontinent as something of an extreme case, with 67.3 per cent of rural young people aged 15-19 illiterate in 1981 compared to 34.9 per cent of urban young people, in nearby Pakistan, the difference was even greater, at 82.6 versus 53.1 per cent (in Pakistan 92.7 per cent of rural

females 15-19 years old were illiterate).[15] Certainly physical distance from the centre is a critical determinant in peripheralization, but it is also often the case that large numbers of peripheralized can be found near the centre, in shanty towns, townships, and urban ghettos.

The larger the scale, the more effort that is required in terms of serial communication and transportation to link the centre with the periphery. Administrative modifications such as decentralization can ameliorate this condition, but the fact remains that large nations tend to do the poorest job in providing social services to their entire population.

Aggravating national scale are a number of factors -- including low population density -- which make it difficult to reach sufficient numbers of people if standard approaches are used for the delivery of educational services. Similarly, where a population is located on difficult terrain -- on an island, or in a mountainous area or jungle that lacks roads, for example -- these difficulties are compounded.

Ethnicity. It is often the case that a particular national group is the primary force in national Government; after all, the founding principle behind the current international order is the formation of States around particular nations.

In a few nations, there is relatively little ethnic diversity; cultural and religious barriers do not complicate the delivery of educational services, nor do they affect the Government's will to provide these services to all. Modern mono-ethnic nations are a rarity, however.

Where a nation is composed of multiple ethnic groups, there are a variety of options for structuring relations that can be either more or less inclusive. In most instances, however, it will be the case that one ethnic group is at the centre of power, while others are likely to be neglected -- or even worse.

One aspect of ethnicity requiring special attention is language. Even where there is ethnic diversity, the delivery of educational services can be eased by the command of a common language, as has come to be the case in many of the industrialized societies and in China and Indonesia. However, in other contexts, the various ethnic groups speak different languages. Educational services can either recognize and accomodate these differences or ignore them.

Class. Modern States have typically been formed through the realignment of class relations. In Europe, modern States were formed by the urban bourgeoisie displacing rural landed elites, and the policies of these States thus came to favour the city over the country. In Japan, it can be argued that a rural and peripheral aristocratic subclass displaced an urban and central elite, which

[15] Gabriel Carceles, *op. cit.*, p. 17.

explains why the modern Japanese State has demonstrated exceptional sensitivity in reaching out to the periphery. Nevertheless, even in Japan it is found that the great universities are located in the leading cities, as are the most prestigious jobs. In Russia, urban workers were at the forefront during the formation of the modern State, while in China, it was the peasant class. education in the former Soviet Union is thus relatively well developed in urban areas, whereas in China there is a periodic rejection of the urban intellectual class -- better red than expert. In sum, modern education favours the pre-eminent class in the modern State.

One particular class consideration is affluence. While class dominance influences the pattern of social services distribution, with increasing economic development it becomes possible for social services to be more equitably distributed without sacrificing the interests of the dominant class.

Population growth. Population growth is usually attributable to an increase in the number of children in a local area, whether the growth derives from fertility or emigration. Much of the past discussion of population growth has tended to assert that it is detrimental to the provision of educational services and to development. public budgets would have to be spread more thinly to accommodate increasing numbers. Such arguments have implicitly assumed that increased numbers are not associated with a rise in productivity or public revenues. However, a growing body of evidence suggests that population growth is usually associated with other improvements in the quality of life, sometimes providing the stimulus for these improvements and sometimes deriving stimulus from them. While population growth is viewed more sanguinely, development experts have come to take a different view of population decline, as this phenomenon often produces fundamental problems in the local economy, and also generally leads to an ageing of the population, with decreasing proportions of the adult population being able to work productively and increasing proportions seeking welfare benefits (where available). In view of all this, development experts have in recent years begun to revise their views on the impact of population growth. (See table 2 for an indication of shifts in dependency ratios between 1970 and the year 2000.)

IV. Educational Structure and Outcomes

The demand for and supply of education can occur in a variety of settings. As a prelude to analysing the interaction of these two contextual forces, it may be helpful to introduce the language commonly used for describing these settings.

Traditionally, education was largely carried out in informal settings -- the family, the community, the church or the mosque. The modern era has seen the creation of formal schools and school systems which, though organized in various ways, generally involve three or more levels. A very preliminary description of

Table 2. "Young Age" (Ya), "School Age" (Sa), and "Old Age" (Oa) Dependency Ratios (Percentages)

	1970			1980			1990			2000		
	Ya	Sa	Oa	Ya	Sa	Oa	Ya	Sa	Oa	Ya	Sa	Oa
WORLD TOTAL	**65.7**	**36.3**	**9.5**	**59.9**	**35.1**	**10.1**	**52.6**	**29.7**	**10.1**	**50.6**	**29.2**	**10.9**
Developing countries:	**76.6**	**41.1**	**6.9**	**69.3**	**40.4**	**7.2**	**59.9**	**33.0**	**7.5**	**56.0**	**32.1**	**8.3**
Sub-Saharan Africa	86 5	44 7	3 6	90 3	46 8	4 8	92 8	48 6	6 0	91 9	48 9	5 5
Arab States	87 3	47 6	7 9	82 8	43 7	5 8	81 4	44 9	6 8	73 0	41 1	5 5
Latin America/Caribbean	79 6	44 1	7 2	69 1	39 7	7 4	60 8	34 7	7 9	52 9	31 2	8 7
East Asia/Oceania	73 7	39 4	7 3	62 7	39 5	7 5	44 4	25 6	8 0	41 6	24 8	9 5
South Asia	76 0	41 2	6 5	71 4	40 0	4 9	67 3	37 1	7 0	62 2	35 6	7 7
Developed countries:	**42.2**	**26.0**	**15.1**	**36.2**	**21.8**	**17.4**	**32.9**	**19.7**	**18.1**	**31.2**	**18.8**	**20.3**
North America	45 7	29 3	15 7	34 1	21 0	16 8	32 4	19 2	19 2	29 8	18 7	19 2
Asia/Oceania	37 4	21 7	10 8	35 5	22 6	12 9	28 4	17 6	16 7	27 6	16 2	21 9
Europe/USSR	41 4	25 3	15 9	35 9	21 6	18 8	32 9	19 8	18 1	31 1	18 8	20 9

Source: United Nations, Population Division report, 1988 revision, (New York)

Note: The "young-age" dependency ratio (Ya) is defined as the percentage ratio of the population aged 0-14 to the population in the age group 15-64. The "school-age" dependency ratio (Sa) is defined as the percentage ratio of the population aged 6-14 to the population in the age group 15-64. The "old-age" dependency ratio (Oa) is defined as the percentage ratio of the population aged 65 and over to the population aged 15-64.

structure includes a diagram of these levels; one of the most interesting may be found in the *Handbook of Education* published by Cameroon's Ministry of Education, as it clearly illustrates the bilingual and bistructural system in place there (table 3).

Table 3. Structure of Schooling in Cameroon

Average age	Years of schooling	Anglophone system	Francophone system	Level
26	21	Doctorate degree	Doctorat	Higher education
25	20	Master's degree	Maitrise	
		Post-graduate degree	Diplôme d'Etudes Supérieures	
24	19			
23	18			
22	17	First (Bachelor's) degree	Licence	
21	16	Advanced Teacher Training Certificate	Ecole Normale Supérieure	
20	15	Advanced Technical Training Certificate	Grandes Ecoles	
19	14	7 High School: . Grammar . Technical	T - 2e Cycle Lycée	Secondary education
18	13	6 Teacher training	Enseignement 1e . Général . Téchnique	
17	12	5 Secondary:		
16	11	4 . Grammar . Technical	2e Ecole Normale 3e 1er Cycle Lycée	
15	10	3 . Teacher training		
14	9	2	2 e collège d'Enseignement: . Général . Téchnique	
13	8	1	5e Ecole Normale	
12	7	7		Primary education
11	6	6	CM2	
10	5	5	CM1	
9	4	4	CE2	
8	3	3	CE1	
7	2	2	CP	
6	1	1	CI	
[variable; mainly private sector]				Kindergarten or nursery education

Source: Cameroon, Ministry of Education, *Handbook of Education*, (Yaounde, Cameroon)

In table 3, the educational structure for English-speaking areas in Cameroon is shown on the left, while the structure for French-speaking areas appears on the right. The area of the boxes for each level is drawn to approximate the proportion of the respective age cohorts enrolled in the three levels -- or what is referred to in other parts of this book as the enrolment ratio (see chapter three for a formal definition). The previous discussion of supply and demand highlights several contextual features known to influence the enrolment ratio for the first or basic level of education.

The Cameroon diagram illustrated in table 3 only focuses on the formal structure of public education. It would be possible to add preschool education as a level preceding basic education in this diagram, though preschool education in Cameroon is relatively modest in scale and exists primarily in the large cities. It should be noted, however, that in many countries this "new" level is quite extensive.

Supplementing the three-plus levels of formal education are both the non-formal and the informal educational structures. Non-formal basic education includes youth and adult education programmes aimed at providing specific skills that these target groups do not acquire through formal schooling. In some nations, these programmes are extensive and are provided by a variety of groups.

Another important development, especially in recent years, has been the gradual elaboration of informal education. For many decades, the newspaper has been an important means of informing people about various developments, after the Second World War this was supplemented by the radio, which can reach remote areas more easily and economically. In recent years, television, movies, and videos have also come to assume an important educative role. These informal educational means are sometimes referred to as "third-channel" or multi-channel learning, and are said to have a considerable impact. Indeed, a recent survey of Japanese young people suggests that this third channel may be more influential than either the first or the second channel (formal or non-formal education) -- at least by the time young people reach adolescence.

National "structures" vary widely and in so many different ways, educators lack a unified vocabulary. Later, some of these variations will be explored, but the focus here is on one element of the structure: the basic level of formal education. Several contextual factors that influence the relative enrolment of children at this level are considered. Relative enrolment is measured by the enrolment ratio (the number of children enrolled over the total number of children in the 6-12 age cohort), which can also be referred to as an outcome of this formal structure.

V. "Quantifying" the Impact of Educational Context

While the focus in this modern century has been on realizing the ideal of Education for All, it is remarkable how limited the available official statistics are for measuring the progress made in realizing this ideal. One of the few widely available statistics is the gross enrolment ratio, i.e., the proportion of children in the primary age group in a nation who attend primary schools, or the proportion of youth in the secondary age group who attend secondary schools. In poorer countries, school enrolments are a fundamental concern.

Table 4 below relates national differences in these proportions to several of the indicators of supply and demand discussed earlier. This table shows that equality in educational provision is affected by national income level, degree of urbanization, extent of population concentration, national scale, ethnic homogeneity, government centralism, and even government tradition.

Table 4. Cross-National Correlates of Enrolment Ratios, 1985

	Primary enrolment ratio	Secondary enrolment ratio
GNP per capita	.29	.67
Population	.16	.04
Population density	.10	.20
Urbanization	.52	.81
Ethnic complexity	-.36	-.45
Centralized Government	-.37	-.53
Centralized finance	-.20	-.40
English tradition	-.09	-.04
French tradition	-.30	-.46

Source: State University of New York at Buffalo, Center for Comparative and Global Studies in Education, "Political impacts of education" (New York, 1994).

VI. Changing the Context

Improvements in the structure and outcomes of education can often be facilitated by changes in context. From the above discussion a variety of important macro policy shifts have been identified, including changes in the level of funding for education (especially basic education), greater incorporation of the peripheral areas, more decentralization in the delivery of educational services, and the increased mobilization of the private sector.

These macro changes, while of obvious importance and interest, may seem beyond the reach of the front-line educators of UNICEF. However, most of these macro changes are really no more than a summation of many smaller actions which are often carried out in the field by the front-line educator.

A recent UNICEF survey of strategies for girls' education (summarized in table 5) helps to illustrate the relationship between some of these smaller actions

Table 5. Strategies for Promoting Female Education in the Developing Context

Strategies	Interventions	Factors addressed		Positive impacts		
		Supply	Demand	Access	Retention	Achievement
1 Locate schools closer to communities	• Bring schools closer to communities • Create culturally appropriate facilities, including provision for separate water and sanitation facilities • Establish single-sex schools	•	•	•	•	•
2 Promote the hiring of female teachers	• Increase the supply of female teachers • Provide incentives • Provide training locally	•	•	•	•	•
3 Lower the costs to parents	• Provide scholarships • Provide textbooks and uniforms • Address the opportunity costs of girls' labour	•	•	•	•	•
4 Develop relevant curricula	• Render the curriculum more relevant • Eliminate math and science gaps • Account for the future now	•	•	•	•	•
5 Increase community participation	• Support community groups that show an interest • Solicit the support of community leaders • Involve parents in planning, management, decision-making and advocacy • Recruit teachers from the local community		•	•	•	•

Table 5. ***(continued)***

Strategies	Interventions	Factors addressed		Positive impacts		
		Supply	Demand	Access	Retention	Achievement
6 Promote localization/ decentralization	• Empower communities with responsibility through local management mechanisms • Formulate indicators to monitor progress • Establish greater links among levels of administration		•	•	•	•
7 Promote advocacy and social mobilization	• Develop a comprehensive strategy • Prepare an action plan • Use "third-channel" technologies • Allocate sufficient resources for information dissemination		•	•	•	•
8 Design systems that accomodate the needs of female students	• Prepare diagnostic studies • Design flexible schedules • Provide instruction in discrete units		•	•	•	•
9 Support multiple delivery systems	• Encourage "experimental" schools • Establish regional educational resource centres • Establish stronger links among the different systems • Provide incentives to encourage participation in non-formal or non-traditional alternatives	•	•	•	•	•

Source UNICEF. *Learning for the 21st Century. Strategies for Female Education in the Middle East and North Africa* (Amman: UNICEF-MENARO, 1994).

and the macro changes. The table, which groups a number of grass-roots interventions in nine strategic areas, shows how each of these areas is linked to the supply of and demand for education.

As has been indicated above, the geographic dispersion of schools works against easy access; the strategic response is the establishment of schools closer to local communities. A shortage in the supply of teachers limits the system's ability to serve children; increasing national budgetary allocations for teachers or developing new means for recruiting them can have an impact on enrolments. Rising affluence improves access; conversely, lowering the cost to parents may also have a positive impact on access. The substantive chapters that follow contain a number of additional examples of small or micro actions that can produce macro results.

VII. Donors as a Key Element in the Context

Any of the actors involved in the educational process can take the initiative to change the context. However, it is often the case that donors have a comparative advantage, for they are sufficiently independent of local conditions to allow for an objective assessment of their requirements. At the same time, donors have sufficient resources to promote the types of small actions that are likely to have a critical impact.

National Governments are also potential sources of innovation, but most of their resources tend to be committed to routine obligations such as school building, textbook production, and the remuneration of teachers. Most Governments spend relatively little on systematic research related to their educational systems, and hence lack the critical insight needed. Donors can play a useful role in stimulating and funding new research and innovations that Governments, tied down by routine budget commitments, are unable to undertake. Communities and parents are also potential sources of innovation, but in national settings where Governments have come to play the dominant role in the supply of education, community groups and parents often discover that they lack a channel for expressing their preferences. The bureaucratic system closes the door on the local voice, and instead listens to orders from afar. Local groups may experience difficulty in communicating directly with their Governments; however, by borrowing the voice of donors they may be better able to speak to power, and in doing so bring new approaches to the educational endeavor.

UNICEF, as a catalyzing agency, will be challenged to find its particular role in each national context. In some settings, there will be a variety of donors and other innovators providing the stimulus for new approaches. In such settings, UNICEF may seek to specialize its role, focusing primarily on education for the under-served, or it may seek to promote programmes beyond the formal system.

In other settings, UNICEF may find that it occupies centre stage, and that it becomes more opportune to build strong partnerships to focus on the full array of educational services. These choices will follow from a careful survey of each national context and of the presence of other donors, local NGOs and institutions with an active interest in promoting the EFA agenda.

UNICEF is unique in its degree of responsiveness to contexts and situations, symbolized by the considerable stress UNICEF field offices place on supporting and implementing National Programmes of Action (NPAs). As contexts vary widely, it is essential to understand the specifics of a context when advancing a particular Programme.

VIII. Conclusions

This chapter has identified many of the major elements in each context which influence educational improvement. These contextual elements consist of the actors and the ways they interact to affect the demand for and the supply of educational services. The educational structure which UNICEF country programmes seek to influence derives from the intersection of this supply and demand.

In all national contexts, there is room for improvement in this structure through the NPAs. In the final sections of this chapter, several appropriate activities were introduced that could be used to alter the contextual factors of supply and demand. In the chapters that follow, some of these interventions will be explored further.

Chapter Three

COUNTRY PRIORITIES

National policy makers and educators have developed an extensive vocabulary to describe and analyse the impact of educational systems. For example, a review of some 29 national plans of action identifies five generic rationales for government support of education and 34 specific expected outcomes from educational systems (reported in table 6 below).

This vocabulary builds on several decades of cumulative experience in developing ways to forge links between the structures of educational systems and their outcomes (see the annex for a historical review). Strategic planning draws on this vocabulary to identify the outcomes that deserve highest priority in a particular national setting.

The present chapter outlines some of the considerations that go into this priority setting, with particular attention given to the following:

- Laying out a rationale for focusing on the priorities that have an impact on basic education.
- Suggesting a hierarchical logic among these priorities.
- Identifying practical indicators for these priorities that can be used in both a Comprehensive Education Analysis and an assessment of programmatic impact.

I. Thinking About Priorities

Criteria for Identifying Priorities

Importance and parsimony. As can be seen in table 6, many goals have been proposed by planners and educators for national educational systems. All of these deserve consideration, but it would be impossible to include all of them in an NPA, as this would be too confusing. What is required is the identification of a reasonably parsimonious list of priorities which truly reflect the concerns of EFA and allow for well-focused efforts and the necessary resources so that measurable progress might be made towards the attainment of educational goals.

Preciseness. It is important in this section to keep in mind the power of language. Subtle biases in language have powerful effects. One example is educational quality, a concept which entered the lexicon of educational planners in the 1960s as they sought to devote more attention to what was happening in schools. Immediately, some administrators began to associate quality with what went into schools rather than what took place inside; they argued that the quality

Table 6. Summary of Rationales for Educational Expenditure in 29 Plans of Action

Manpower development rationales
Increase the possession of general skills relevant to development
Increase the possession of skills relevant to the modern sector
Provide agricultural development knowledge and skills
Provide rural development knowledge and skills
Increase the prospects for self-employment
Extend literacy to increase productivity and innovation
Develop non-formal education programmes
Social equity rationales
Equalize educational opportunities and reduce regional disparities in access
Reduce income inequalities
Reduce occupational differences among groups resulting from educational imbalances
Provide basic education as a human right
Nation-building rationales
Develop and consolidate a national identity
Promulgate a national language
Promulgate a national ideology
Promote self-sufficiency and self-reliance
Reduce cultural and psychological dependency
Strengthen local institutions
Develop individual potential fully
Localize expatriate manpower
Ensure physical well-being and health
Improving quality of schooling rationales
Improve educational quality through curriculum development
Improve quality through localizing examinations
Improve teacher training
Improve in-service professional development
Improve resources available to teachers
Enhance planning and research capabilities
Increase private education standards
Improving efficiency of schooling rationales
Reduce drop-out rates
Reduce repetition rates
Increase enrolments
Improve cost-effectiveness of teacher training
Improve efficiency of plant utilization

Source: Keith Lewin, Angela Little, and Christopher Colclough, "Adjusting to the 1980s: taking stock of educational expenditure," in: IDRC, *Financing Educational Development*, the proceedings of an international seminar held in Mont Sainte Marie, Canada, from 19 to 21 May 1982 (Canada, IDRC, 1982).

problem derived from a shortage of funds, antiquated buildings and insufficient teachers. Principals and teachers were professionals and knew what to do, provided they had the resources. In many countries, lowering the student-teacher ratio became a symbol of this quality argument. Subsequent research has indicated that such arguments were largely misguided; when gauged according to student learning achievement, a variation in the student-teacher ratio between 15 to 1 and 45 to 1 yields at best a marginal difference in educational quality.[19]

Another group sought to focus the quality discussion on the limited goal of academic achievement. This group acknowledged that schools had many purposes but that the best schools were those that focused on specific goals such as improving achievement scores. It was argued that many educational goals were diffuse and beyond evaluation, while academic achievement was specific and could be evaluated using reliable tests. Thus, it was proposed that quality be equated with academic achievement.

Both of these arguments ignore many of the concerns of parents and educators, such as the need for a relevant education that teaches life skills or vocational skills or an education that develops moral and spiritual values. Many understand quality to include all of these objectives, yet the aforementioned arguments would, in effect, lead to a more limited definition of this concept. A way out of this linguistic morass is to settle on more precise concepts; rather than talking about educational quality, one should speak of academic achievement, the mastery of vocational skills, and the learning of values.

Similarly (as is noted below and in the annex), there are many different notions of educational efficiency. Some focus on the speed of graduation, others on financial cost, and still others on meeting labour market needs. Again, it is important to develop a more specific list.

Objectivity. It is important in setting priorities among the various goals to have some means of determining progress. Some of the priorities discussed above have been given considerable attention by educators, so a number of means exist for judging or measuring this progress, including surveys and tests. Other priorities have received less attention or are simply more intractable, so they may not be associated with widely accepted measures. Progress in conveying values is one example. What are the values a school is expected to convey? Can these be measured on the spot with a paper and pencil test or are more indirect measures preferable? Just because these issues have not been resolved in the past does not mean they are beyond resolution. The question is whether or not there may be some objective way of assessing progress.

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[19] Gene V. Glass, Barry McGaw, and Mary Lee Smith, *Meta-Analysis in Social Research* (Beverly Hills, California, Sage Publications, 1981).

Recent Proposals

The World Bank recently released "Primary education",[20] a major policy paper which focuses on three key outcomes

- **Low primary completion rates** In low-income countries fewer than two thirds of those who enrol in primary school complete the entire cycle This proportion has been declining in recent years The principal school-related determinants of dropping out are poor learning and repetition On average, repetition rates in low- and middle-income countries are two to five times higher than those in upper-middle- and high-income countries, with the highest repetition rates found in the lowest-income countries
- **Low student achievement** Even children who complete primary school have not learned the core skills commonly specified in the national curriculum Students in low-income countries tend to perform poorly in terms of both national and international measures of cognitive performance in mathematics, science, and reading comprehension Performance is poorest for tasks that require students to apply knowledge to new problems
- **Inadequate enrolment** Although most middle-income countries have achieved nearly universal primary enrolment, fewer than 75 per cent of school-age children in low-income countries (54 per cent without China and India) are enrolled in primary school This is the case even though places are available for 97 per cent (67 per cent without China and India) In half of the low-income countries, fewer than half of the school-age children are enrolled, and 68 per cent of developing countries have not attained their goal of universal primary enrolment Most of those not in school are girls, rural children, and children of the poor and of minority groups[21]

This list, while a useful start, does have some problems First, it relegates issues of access to third place and then restricts equity to this category, whereas it can easily be argued that equity is a concern both in access and at later stages in the educational process Second, while achievement is given prominence in this list, the focus is limited to achievement in the subjects of math, science and reading, nothing is said of life skills or vocational skills Finally, the list completely bypasses the normative charter of primary schools

[20] Marlaine E Lockheed, Adriaan M Verspoor, and associates subsequently published a supporting analysis entitled *Improving Primary Education in Developing Countries* (Washington, D.C., World Bank, 1991)

[21] Frank Dall, "Basic education as a child right the challenge of implementation," in *Innocenti Centre Occasional Paper Series*, No 4 (Florence, UNICEF, 1993)

Douglas Windham recently provided another influential examination of many of these concepts. He makes a distinction between the outputs of educational systems, which can be thought of as the intended accomplishments of schools, and the outcomes of education, which tend to be more temporally distant and involve less certain accomplishments, according to Windham, "educational outcomes are determined by many other factors than the nature and quantity of educational outputs, and the degree of determinacy of inputs to outputs is certainly less than the determinacy of outputs to inputs."[22] The broad categories of accomplishments Windham places in these two groups are summarized in table 7.

Table 7. A Model of the Educational Process

Inputs • Student characteristics • Teacher characteristics • Instructional materials • Facility characteristics
Process • Forms of instructional organization • Alternative technologies
Outputs • Cognitive achievement • Improved manual skills • Attitudinal changes • Behavioural changes
Outcomes • Employment • Earnings • Status • Attitudinal changes • Behavioural changes

Source: Douglas Windham, "Indicators of educational efficiency", *Forum for Advancing Basic Education and Literacy* (September 1991), p. 77.

Windham's list is richer than the one proposed in the World Bank policy paper, for example, it specifically mentions improved manual skills as well as attitudinal and behavioural changes. However, a careful reading of Windham's list indicates an emphasis on what happens once children enter schools. his study thus has even less to say about school access than does the World Bank paper.

[22] Douglas Windham, "Indicators of educational efficiency", *Forum for Advancing Basic Education and Literacy* (September 1991), p. 77.

Windham's central concern is developing a means for evaluating the economic efficiency of the various elements in the educational process. Thus, much of his discussion focuses on the considerations involved in developing and interpreting quantitative indicators of these elements. While his schema makes specific mention of attitudinal and behavioural change, his technical discussion skirts these topics.

Of special interest is Windham's technical discussion of the equity issue. Equity, he observes, involves a subjective judgement about appropriateness or fairness in the distribution of a resource. It is possible to determine the relative equality in the distribution of all of the identifiable elements of the educational process, but this objective assessment will not necessarily address the fairness issue. Objective indicators can describe equality in the distribution of resources, but until there is a consensus on the types of equalities that are considered fair, equity cannot be realized.

Many equity discussions focus on who gets into school. Windham proposes that this discussion extend to what happens in school. Do girls get the same access to textbooks as boys? Are there as many teachers in the rural areas as in the urban areas? Similarly, do as many girls as boys complete school, and do they learn as much?

Towards a List of EFA-Relevant Priorities

As can be seen, these various lists reflect the special concerns of the respective agencies and authors. EFA places strong emphasis on primary education, this includes a strong commitment to reaching the children of disadvantaged groups and providing them, preferably in a school environment, with the life skills that will enable them to survive in a changing world. EFA also seeks to foster an educational experience that strengthens local communities and respects indigenous cultures. In view of these commitments, a useful list of priorities to guide EFA-related strategic planning is provided in the following subsections.

Equitable access of children to schools. Access stands at the top of the EFA list. Never before has there been expressed such a consistent concern for girls, disadvantaged children, the homeless, street children, or children at risk. Getting children into school can be viewed as a first step towards addressing many of their problems. The aforementioned World Bank policy paper speaks of "equitable access", suggesting that there is room for subjective judgements in the provision of access. The United Nations Convention on the Rights of the Child and the Education for All initiative reject any compromises, however, access should be equally provided to all children, whatever their circumstances. Equitable access rather than equal access connotes that moral determination.

Relevance of the experiences in these schools In recent discussions about primary education, UNICEF has proposed a special "skills for life" curriculum which seeks to make the school a setting for learning skills that will have immediate applicability in obtaining food and maintaining health. These objectives are here considered sufficiently important to receive at least as much priority as the standard academic curriculum of language skills and arithmetic.

Richness of schools in conveying local, national and global values Relevant education is best conveyed in the language and with the symbols that are most familiar to a child. Another priority is therefore to develop an educational experience that reinforces learning local values and culture in a local language while at the same time striving to broaden a child's horizons to allow him to understand the world beyond his immediate setting.

The need for children to acquire the knowledge and skills emphasized in the teaching-learning process. Schools seek to help children by broadening their mental and moral capabilities. It is not important that children make impressive scores on some abstract achievement test, it is important that all children who go to school significantly benefit from the experience by acquiring a set of skills with which to tackle the changes, chances and challenges of life.

Equitable provision of schooling, taking full account of local circumstances The provision of effective schooling requires different resources in different circumstances. Remote areas and/or communities where parents are poorly educated require more attention than those at the centre. Equity means providing each setting with what it needs to enable children to achieve a mastery of skills.

Efficiency of schools and the school system in realizing these priorities Given the large number of children who are inadequately educated, there is no excuse for wasting resources. Moreover, children will abandon schools if nothing is going on. A concerted effort should be made to energize schools so that they can achieve these priorities as quickly as possible. A reasonable level of expenditure is one aspect of efficiency, keeping in mind that different contexts and teaching-learning processes may require different levels of financial resources.

II. Is There a Hierarchy Among Priorities?

Although the two recent studies discussed above provide their respective lists of priorities, they say little about the relationships among these priorities. In contrast, the discussions surrounding the global EFA initiative argue for attacking issues of access, equity, and relevance first -- and taking up other issues in due course. EFA proposals tend to be largely phrased in moralistic terms. Still, they raise interesting questions. What are the relationhips among priorities? Should some precede others? Must some precede others? If so, why? Who should decide?

The Nature of Systems

As a first step in trying to answer the questions posed above, it is helpful to reflect on the nature of systems. A system implies an organic linkage of component elements. Theorists of psychological systems speak of various needs that are hierarchically linked, basic needs such as food and security have to be satisfied before intermediate and higher needs become germane. Similarly, economists posit a need for a certain degree of productivity in agriculture as a precondition for industrial economic growth. Presumably, then, the components of an educational system -- including its outcomes -- will also have similar systemic links.

Access as the fundamental priority. One link is between access and all other priorities. It is impossible to provide a relevant education or to ensure that young people achieve a mastery of various skills if these young people do not get to school. This obvious link is splashed throughout the World Declaration on Education for All: the first paragraph observes that "more than 100 million children, including at least 60 million girls, have no access to primary schooling"; the third article expands upon this theme, pointing out that greater access enables a school system to address gender, rural, ethnic and other disparities.

Efficiency and access. In systems where large numbers of children repeat grades, considerable teacher time is spent on attempting to help these children advance. This time is thus not available for new pupils, and many may be turned away. Similarly, schools that devote time to children who repeat or drop out also spend other resources on these children. The need for teachers' time and other resources means that extra demands are made on limited school budgets. Clearly, improvements in efficiency will free up some of these resources so that they can be reallocated to other purposes. The acceptance of additional students is one promising alternative, and if full access has been achieved, it becomes possible to devote these resources to improvements in curriculum and instruction.

Relevance and values in education as important priorities. It is apparent that both access and retention can be enhanced if parents and children see some utility in attending school. Less clear are the features of schooling that promote a sense of worth. In urban areas, it is apparent that many children see primary education as a stepping stone to higher levels, so value in their eyes is measured in terms of their success in the academic curriculum. For many other children, however, an extended educational career is unlikely, and it may be that a sterile academic experience is not enough of an attraction. There is a mounting body of evidence to suggest that these children will be drawn to schools to the extent that schools express local values and offer other relevant experiences.

Learning acquisition as an organizing principle. Schools should be purposeful organizations, seeking to convey specific skills, knowledge, and

attitudes to their pupils. Unfortunately, in some systems, schools are little more than places where teachers receive their pay, and little systematic attention is devoted to pupil learning; conditions in these schools are often difficult. It is particularly difficult to facilitate learning when educational goals are not specified. Thus, one common theme in current discussions about primary education is the establishment of clear learning goals, coupled with the development of some means for assessing the progress of pupils in realizing these goals. Where educational goals are explicit, teachers find it easier to organize their work, and school managers have a basis for developing or purchasing instructional materials and for evaluating the performance of schools. For some, assessment implies the development of national standards and a sophisticated examining process. However, less complex alternatives are possible and are likely to be preferable, as they are less threatening to more marginal schools.

Learning acquisition versus efficiency. Wadi Haddad has highlighted the link between educational standards and efficiency.[23] Setting higher standards tends to result in an increase in repetition and drop-out rates. Lowering standards reduces these inefficiencies, though obviously the abandonment of standards destroys a major objective of schooling.

In some educational systems, policy makers have a strong commitment to high standards, but tend to base their systems and expectations on the standards existing in some distant metropolitan country; schools are expected to teach in a metropolitan language, and children only advance if they pass exams designed in some far-off place. Within such systems, few children advance. This arrangement leaves few children qualified for secondary or higher education, and so it becomes feasible to lavish generous funds on these advanced institutions. Clearly, however, the slavish attention to high (and foreign) standards means that many children are deprived of the opportunity to learn.

Over the past decade, a number of policy analysts have proposed assessment and even incentive schemes that focus on the mastery levels of children in the final years of primary education. Such schemes may have the beneficial effect of motivating school managers to bring all of their pupils up to the mastery level.[24] However, past experience suggests that these schemes may promote a different outcome: managers may decide to fail their weaker students so that the performance of these students will not lower the school's aggregate score. An excessive focus on mastery, particularly mastery according to some external standard, may have unexpected consequences.

[23] Wadi Haddad, "Educational and economic effects of promotion and repetition practices", *World Bank Staff Working Paper 319* (Washington, D.C., World Bank, 1979).

[24] H.C.A. Somerset, "Examination reforms: the Kenya experience", *Education and Training Department Discussion Paper EDT64* (Washington, D.C., World Bank, 1987).

Both learning acquisition and efficiency are important priorities, and school systems will wish to strike a balance between the two. Where systems have adequate knowledge of their success with respect to these competing goals, it becomes possible to develop a long-term strategy that leads to improvements in both. East Asian schools are particularly noteworthy in this regard. In this part of the world, full access has been achieved and drop-out and repetition rates are virtually nil. Further, primary-level children in these two countries repeatedly outperform children from other nations in reputable international achievement tests. It should also be noted that student-teacher ratios tend to be higher in East Asia than in many of the developing and developed nations. In Japan, the average primary classroom has 39 students, and in Korea it has 45. Thanks to impressive pupil discipline and motivation, teachers are able to handle large numbers of students -- another form of efficiency. Clearly it is possible to design educational approaches that are both highly efficient and achieve respectable learning targets.

Teachers as a key factor in learning. During the early 1960s, in discussing the quality of education, C. E. Beeby [25] proposed a link among several educational goals (summarized in table 8).

For Beeby, the major determinant in the development of an educational system was the availability and preparation of teachers. The teachers' skills set limits on educational accomplishments. Beeby observed that within a large educational system, some schools might have more qualified teachers than others, and hence might accomplish more.

In a thoughtful defence of traditional teaching, Gerald Guthrie observes that Beeby's stages capture the essence of much of the Western thinking that has guided recent teacher education reforms and interpretations of the failures of such reforms. These reforms have sought to shift teaching from the more traditional and formalistic mode towards a more liberal, student-centred method. Guthrie questions this thinking:

> *Rather than concentrating on student learning as the criterion variable against which quality of teaching should be assessed, many innovations have taken teaching styles themselves as an end product. Several of the assumptions made about the relationship between teaching style and learning are open to the charge that they are insufficiently validated or that they are valid only in some cultural context.* [26]

[25] C. E. Beeby, *The Quality of Education* (Cambridge, Massachusetts, Harvard University Press, 1966).

[26] Gerald Guthrie, "In the defense of traditional teaching in lesser developed countries," in: Val D. Rust and Per Dalin (eds.), *Teachers and Teaching in the Developing World* (New York, Garland Publishing Inc., 1990), p. 219.

Table 8. Stages in the Growth of a Primary School System

Stage	Teachers	Characteristics
I. Home school	Ill-educated, untrained	Unorganized, relatively meaningless symbols, very narrow subject content -- three R's, very low standards, memorization all-important
II. Formalism	Ill-educated, trained	Highly organized, symbols with limited meaning, right syllabus, emphasis on three R's, rigid methods -- "one best way", one textbook, external examinations, inspection stressed, discipline tight and external, memorization heavily stressed, emotional life largely ignored
III. Transition	Better-educated, trained	Roughly the same goals as stage II, but more efficiently achieved, more emphasis on meaning, but still rather "thin" and formal, syllabus and textbooks less restrictive, but teachers hesitate to use greater freedom, final leaving examination often restricts experimentation, little in classroom to cater for emotional and creative life of child
IV. Meaning	Well-educated, well-trained	Meaning and understanding stressed, somewhat wider curricula, variety of content and methods, individual differences catered for through activity methods, problem-solving and creativity, internal tests, relaxed and positive discipline, emotional and aesthetic life, as well as intellectual, closer relations with community, better buildings and equipment essential

Source: C.E. Beeby, *The Quality of Education* (Cambridge, Massachusetts: Harvard University Press, 1966).

Focusing specifically on Beeby's typology, which Guthrie views as a good representation of these fallacies, he specifically charges that the logic of the stages is circular. The criterion of judgement is culture-bound, the association of an ability to enquire with enquiry-related teaching techniques is not a necessary one, and attempts to have students learn higher-level cognitive skills may be inappropriate to their level of intellectual development.[27] Guthrie's comments certainly raise important questions about the specific systematic relationships proposed by Beeby.

Beeby also points to other developmental factors influencing schools, such as location, community wealth and cultural level; hypotheses related to some of these factors have been investigated by Stephen Heyneman and other researchers.[28]

Clearly, it is not only the resources available to schools but also the broader socio-economic setting that determines educational accomplishments. In the next chapters, the relationships of various resources to school accomplishments will be considered in more detail. Here, it is sufficient for the present authors to concur with Beeby and others that there do appear to be systematic relationships among the various goals or priorities. The sufficient accomplishment of basic-foundation priorities is a precondition for progress on higher-order priorities; educational initiatives that ignore this logic are likely to suffer.

III. Is the Whole the Sum of the Parts?

Another systemic issue concerns the relationships among the different actors in the educational system. The language used for discussing priorities often tends to reflect the concerns of the national Government and the donors, who purport to speak for other actors -- but do they? And just as important, do gains in these priorities have the same implications for actors at different levels?

One way of illustrating this problem is to look at the question of student learning acquisition. National planners focus on national averages in achievement or on averages for local areas; however, these averages reflect a distribution of scores, with some individuals and/or groups doing well and others not so well.

Thinking only about groups, it is possible for the same average to be achieved with many different kinds of distributions. One possibility would be to have similar means and distributions for each subgroup of interest, though the more common outcome is to have vastly different distributions. In the United States, where such information is extensively examined, distributions vary

[27] Ibid., pp. 221-222.

[28] Stephen P. Heyneman and William J. Loxley, "The effect of primary-school quality on achievement across twenty-nine high- and low-income countries", *American Journal of Sociology*, 88 (6), (June 1983).

widely among States, rural and urban groups, socio-economic classes, and racial and ethnic groups. Are there systemic links between or among these differences, and are they amenable to initiatives? There has been some experimentation in these areas, at least at the classroom level. Some teachers intentionally classify their pupils into subgroups according to their presumed ability, while others prefer to ignore these differences or create mixed-ability groups. Establishing ability groups is justified on the premise that it enables children of different abilities to develop more naturally and at their own pace. These practices seem to work best for those in the high-ability groups, as they benefit from the competition with high-ability classmates. They do little for the low-ability groups, however, lacking the stimulation of high-ability classmates, the low-ability children make very slow progress. The net result is a widening of achievement disparities, high-ability students are able to make rapid progress, and the rest flounder. Achievement distribution stretches out, and the grade-adjusted mean score for all the students tends to drop. Thus, what is good for the bright individuals may not be good for all.

It is possible that this same systemic outcome occurs when children of differential ability end up in stratified schools versus equal schools, unfortunately, there are few satisfactory studies on the matter. Still, it is clear that great achievement disparities are evident among schools, particularly in urban areas, because bright students are allowed to select schools noted for enrolling bright students. As elite schools cream off the best students, other schools end up with the weaker half of the distribution, and this may affect their potential for doing a good job, they have lost their bright students, who are a vital addition to both the classroom and the school climate.

Access invites parallel inquiry, but the focus shifts now from the classroom to the community. In some communities, virtually no children go to school, and that is viewed as acceptable. In others a few go, and that is a matter of choice. In still others, many go, so the rest feel the pressure to conform. The social pressure to increase access is primarily community-based.

While large numbers of children in one community may go to school, it is possible to have an adjacent community where very few go. The two communities may have little interaction, and the second may feel no pressure to promote access. However, it may be possible through a social campaign to heighten pressure in the second community for increased access. Studies of social contagion and diffusion have helped to create an understanding of the conditions that lead to the spread of the incidence of a phenomenon such as interest in a product or the contracting of a disease. Remarkably, in the field of education, such studies do not exist. Current educational approaches are so singularly focused on the individual child and his/her school that there is often a failure to give thoughtful consideration to the broader social context.

IV. How Are Outcomes and Priorities Measured?

In making decisions about what to emphasize in an educational programme, it is important to understand the current state of education

Quantitative and qualitative indicators Both qualitative and quantitative information prove valuable in developing a picture Quantitative information has the supposed merit of being more reliable, and of allowing for more precise comparisons, of course, sometimes the numbers are falsified or are based on less-than-explicit assumptions that may mislead the analyst

Limited availability of indicators In terms of the several priorities discussed above, indicators have thus far only been extensively developed for two access and efficiency For each priority, there are several choices A number of these indicators are routinely collected by virtually all of the education ministries throughout the world, and can be used for cross-national comparisons, others are mainly collected for in-country comparisons For other priorities the indicators are less numerous, though in particular national settings there is likely to be useful information available

The horizontal dimension The process of collecting information on educational performance begins at either the school or the household level, so these data can be used to examine the impact of the system at various levels Does it benefit individual children, communities, regions, and the nation? Much international discussion (including the analysis presented in the next section) focuses on performance at the national level, but even in nations that have impressive average levels of performance there may be certain areas with sub-par performance Therefore, in the development of national programmes, it is important to go beneath the surface to examine education's impact on the full range of actors involved

The following is a review of some of the standard indicators More detailed discussions of indicators are available elsewhere, along with proposals for their systematic development by national ministries [29]

Access

It has been proposed here that equal access is the fundamental priority Most educational systems collect considerably detailed quantitative data related to this concept Selected cross-national indicators of access are having a powerful influence on the strategic planning of donors, including that of UNICEF

[29] Douglas Windham, *Indicators of Educational Effectiveness and Efficiency* (Paris, UNESCO - International Institute for Educational Planning, 1989), and Douglas Windham and D.W. Chapman, *The Evaluation of Educational Efficiency: Constraints, Issues and Policies* (Greenwich, Connecticut, JAI Press, 1990)

For primary level students, two aggregate indicators tend to be relied on

$$\text{Gross enrolment rate} = \frac{\text{Total enrolment at the primary level}}{\text{Population aged 6-12}}$$

$$\text{Net enrolment rate} = \frac{\text{Enrolment of those aged 6-12 at the primary level}}{\text{Population aged 6-12}}$$

The values for the first indicator are usually higher than those for the second, as many primary-level children are above the "intended" age because they entered late or are repeating. A third indicator is sometimes added when looking at secondary education

$$\text{Total enrolment rate} = \frac{\text{Enrolment of those aged a-b at all levels}}{\text{Population aged a-b}}$$

In contrast to the indicators for virtually all of the other priorities that will be discussed, access indicators require information on both the children who make it to school and those who do not make it. The data on children in school can be supplied by a national ministry from its school census or by a national statistics bureau from a survey of parents and children. However, the data on all children of the relevant age necessarily come from the census. Thus, for all of the access indicators, two different calculations are possible: one involves data exclusively provided from the national census, while the second includes education ministry data in the numerator and national census data in the denominator. In virtually every situation where the two calculations have been compared, the first calculation has provided lower numbers.

It might be inferred from this finding (i.e., the census-ministry data disparities) that there are systematic incentives to encourage inflation in the statistics reported by education ministries. School officials may exaggerate enrolment numbers in order to look good to their superiors. It is difficult to determine how pervasive or serious this bias is. However, knowing that it prevails encourages healthy scepticism about official educational statistics that are uncorroborated by second sources, all of the other indicators discussed below come exclusively from education ministry surveys. Box 7 provides an evaluation of the applicability of such data in Egypt.

Box 7
The Relevance of Egyptian Data on the Access and Quality of Primary Education

Although the Ministry of Education (MOE) has developed an extensive national database on education (collected from school records), a recent study has concluded that reliable enrolment ratios, especially by sex and region, are not available, mostly because of a deficient demographic database. In particular, in calculating *net* enrolment ratios, the MOE data on pupils by age introduce an additional element of error. This makes it difficult to monitor the extent of universality of primary education or to plan for complete access to primary education. In addition, analysing the determinants of access to education requires special surveys, and these are rare.

A data set derived from a large labour-market study carried out in 1988 (Fergany, 1991) was utilized to chart access to primary education in a number of regions of the country, differentiating between rural and urban areas and between villages and hamlets in the countryside. The estimates of school attendance ratios for the age group 6-11 produced two major conclusions:

- Low school attendance levels are far more characteristic of rural areas. Upper Egypt as a whole ranks first, and the hamlets of Upper Egypt second.
- The largest discrepancy in school attendance ratios among the regions considered is found in school attendance for girls.

A very approximate index of gross enrolment by governorate and by gender was also considered. The index expresses the relative pattern of gross enrolment in governorates by relating the number of pupils in primary education (according to MOE statistics) for the school year 1991/1992 to total population, assuming equal rates of population growth across governorates since the 1986 census. Unfortunately, this index does not provide a breakdown according to rural/urban residence, let alone a differentiation between villages and hamlets, and it is limited to enrolment in MOE schools only. The border governorates are excluded due to their small population size, a factor which tends to exacerbate existing errors.

Though not originally designed for the purpose, the same 1988 data set was used to investigate determinants of access to education in the age group 6-11. Among the socio-economic factors considered in this analysis, child labour -- particularly work outside the household -- is the most serious impediment to universal school attendance. Girls are clearly at a disadvantage, especially in the rural areas of Upper Egypt and the West Delta governorates. The levels of education in the household and in the local community are major determinants of school attendance; by comparison, the economic levels of the household and of the community are relatively unimportant factors.

There is hardly any solid information available on the quality of the output of primary education, much less its determinants.

Currently, the available information on pupil achievement is based on standard examination results which generally fail to reflect the "real" output of education in terms of actual knowledge and the skills imparted to pupils.

Source: UNICEF, "A survey of access to primary education and acquisition of basic literacy skills in three governorates of Egypt" (Cairo, UNICEF, 1994).

Efficiency

Efficiency is another area for which a wide variety of indicators have been developed. Conventional indicators, drawing on the engineering model, broadly focus on the amount of wasted time pupils spend in school, with waste defined as any time away from steady progression from admission to the completion of a course. In recent years, various financial indicators have also been proposed. A major limitation of efficiency indicators is the paucity of data; this is especially the case for financial indicators, so they will not even be discussed here.

Internal efficiency indicators are built on information about enrolments, repeaters and drop-outs from repeated school surveys. In the best situations, this information can be summarized in a cohort flow diagram (as presented in chapter one). However, there are problems: many systems do not routinely collect or process data on an annual basis, so it is difficult to complete the diagram, and these diagrams assume that children stay put, and that once they drop out they stay out. The truth, however, is that children move among schools and "drop in",[9] so the diagrams can lead to measurement distortions. These distortions have less of an impact at the higher (e.g., national and provincial) levels of aggregation, but the effect is considerable at lower levels such as the local school district or school. Three widely accepted efficiency indicators are described below.

- **Repeaters as a percentage of total enrolment.** This can be computed with information from a single school survey.
- **The number of years required to produce a graduate.** With bold assumptions, this also can be computed with information from a single school survey, but most analysts prefer data from at least two sequential years in order to verify the number of drop-outs.

[9] Ernesto Cuadra, "Indicators of student flow rates in Honduras: an assessment of an alternative methodology," *BRIDGES: Research Report Series*, No. 6 (Cambridge, Massachusetts, Harvard Institute for International Development, December 1989).

- **The percentage of the primary cohort reaching the terminal grade.** Again, estimates can be made from a single school survey, but a better estimate is obtained with time-series data

There is a wealth of literature on efficiency indicators that identifies a great variety of the more complicated indicators, the major limitation is the quality of available data. As noted earlier, these indicators are relatively more reliable at a highly aggregated level, but less so at the school level, due to children's movement among schools and to drop-ins. Still, it is useful to compute these indicators at the school and district levels and to examine distribution patterns.

Learning Acquisition

Many of the recent policy discussions have focused on "actual learning and outcome".[31] Schools have always sought to determine how much children learn by administering various forms of tests. In all schools, teachers carry out periodic classroom tests and adjust their teaching accordingly.

In some school systems, the teachers are also required to administer tests developed at the provincial or national level. However, questions inevitably arise about the reliability and utility of these tests, particularly relative to their high costs. These questions are particularly apropos for the primary level, where young people have little experience with testing and where so many other factors can influence their performance. Still, many nations do require primary school graduates to take leaving exams; in Sri Lanka these test results are used as a basis for awarding scholarships to needy students who wish to continue in school. Where tests are available, they may be used for comparisons between and among districts or even schools. Thailand is one nation that uses the results of a uniform national test to monitor educational performance. The technicians dealing with Thailand's highly advanced management information system can compute results at any level of aggregation from the nation to the school. Districts (and even schools) whose test results slip are required to explain their shortcomings, and the responsible officers in districts or schools with a repeatedly weak performance may be subject to disciplinary action.[32]

While Thailand relies on national tests, Indonesia has developed provincial-level tests. There is a strong sense of cultural difference among the provinces, so a common national test is not considered appropriate; however, the local testing

[31] World Conference on Education for All (WCEFA), held in Jomtien, Thailand, from 5 to 9 March 1990. *World Declaration on Education for All* (New York, Inter-Agency Commission: UNDP/UNESCO/UNICEF/World Bank), article 4, 1989.

[32] Christopher W. Wheeler and others, "Policy initiatives to improve primary school quality in Thailand: an essay on implementation, constraints, and opportunities for educational improvement", *BRIDGES Research Report Series*, No. 5 (Cambridge, Massachusetts, Harvard Institute for International Development, 1989).

groups draw on a nationwide item bank in developing their distinctive local tests. At one point Japan used a national test for primary-level students, but later abandoned it out of fear that it was stimulating excessive competition and leading teachers to favour their best pupils at the expense of the rest.

The above clearly illustrates that educators differ widely on the appropriateness of measuring the acquisition or mastery of the intended curriculum by relying on an external test. Recent donor discussions have urged an expansion of external tests, and have even proposed the development of international tests so that nations and donors can compare the performance of national systems. Indeed, some third-world countries have already participated in certain international tests, and the results are interesting.

Relevance

Achievement tests necessarily reflect an assumption of educational hierarchy: the tester knows what the pupil needs to know, and uses the test to determine how well the pupil has performed in complying with the tester's prescription. Relevance assumes that the pupil (or his/her parent) understands what should be learned. Most discussions of relevance are ad hoc, pointing to simple examples of irrelevant curricular materials (children are asked to spell train when they have never seen one, or to describe a flower that does not grow in their area) -- or the discussions make hierarchical judgements that children need certain skills for if they are to do well.

Participatory approaches to education seek to flatten the hierarchy, to turn directly to parents and children to discover what they seek through education. Perhaps the best approach is through face-to-face meetings that yield findings specific to each and every school. However, other approaches of a more quantitative nature could be attempted, such as marketing surveys or even the inclusion in periodic national censuses of simple questions about the relevance of local education. Tabulations of these relevance questions at the district level would help to show which areas had education that fit the clients' needs and which did not. These results could become the basis for special action in areas where there is discontent.

Equality

In the present discussion of priorities, a sharp distinction between equality and equity has been drawn. Equality can be objectively assessed with various indicators of dispersion (which will be introduced in this section), whereas equity -- which implies a judgement concerning relative fairness -- cannot be objectively assessed. Still, at the very minimum, it can be posited that inequity occurs where inequality is observed. Focusing on inequality is especially important in the early

years of socialization, for the inequities introduced at this stage have the most lasting effect. Equal access is the first consideration here (see below).

Gender differences. A straightforward approach to determining the relative gender equality of access involves comparing either total or net enrolment ratios computed by gender. Gender-specific enrolment ratios are beginning to become available for most nations. Inequality is most striking in selected countries in Sub-Saharan Africa, South Asia, and the Middle East.

Because the numbers of girls and boys are close to equal in most populations, a simpler measure which relies only on school census data is often used, and is computed as follows:

$$\text{Gender equality} = \frac{\text{Number of girls} \times 2}{\text{Total enrolments}}$$

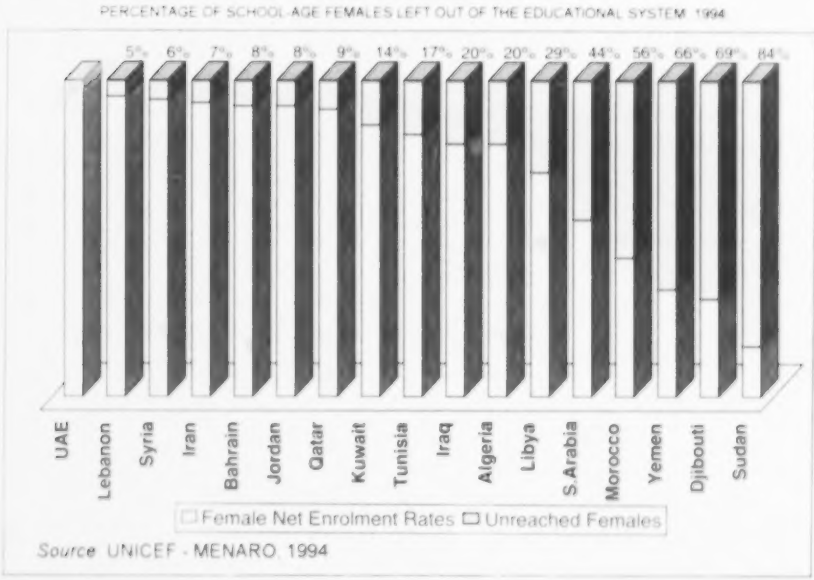
Values close to 1 indicate reasonable gender equality in access. Knowing that girls are nearly as likely as boys to enter school, but also expecting that they may experience discrimination or parental objections once they begin attending, one comes to recognize the importance of computing separate indicators for each grade level.

It is of particular concern if the indicators begin to diverge in the early years, for this means many girls are failing to gain sufficient schooling even to achieve literacy. Further refinements might focus on comparisons of drop-outs and repetitions of grade levels by gender, are the schools tougher on either of the gender groups? Figure VIII shows the results of a cross-regional analysis for Middle Eastern countries of the proportion of girls still unreached by the primary education systems in 17 countries.

Regional and ethnic/racial differences. In large educational systems, it is common for Governments to collect and publish statistics similar to those described above for other social and geographic categories. The most common breakdown is by province or State, and sometimes the statistics are also broken down into urban and rural classifications. In countries where ethnic/racial categories are a focus of policy, breakdowns may also be established within these categories. The more refined the categories, the more possible it is to learn about inequalities in access.

Equality of opportunity. It is possible to focus on aspects of the educational process other than equality of access, ranging from equality in the provision of inputs to equality in achievement results. D. Nielsen and H.C.A. Somerset, for example, have conducted a careful examination of the distribution of school teachers in Indonesia, focusing on inter-provincial, inter-district and

Figure VIII. Primary Education Indicators for the Middle East and North Africa Region



lower-level disparities [33] Descriptive statistics such as the Gini coefficient prove useful in summarizing these distributions

In the early stages of educational expansion, educational leaders sought to improve equality in the provision of educational resources, arguing that it was up to individual pupils to take maximum advantage of these opportunities those who tried would succeed In more recent years, educators have become increasingly aware that individuals are not equally equipped with either the will or the ability to strive, some reformers have thus proposed that equality of opportunity should be equated with equality in the mastery of the curriculum as measured in skill and achievement tests Comparative measures of the standard deviation in achievement scores in classes, schools, or districts are helpful in addressing these issues

Equality and Equity

Equity, as has been noted, involves a judgement about the appropriateness or fairness of the provision of educational opportunities It is one thing to observe an unequal distribution, it is quite another matter to decide what is a fair distribution

[33] D Nielsen and H C A Somerset, "Primary teachers in Indonesia: supply, distribution, and professional development" (mimeo), (December 1992)

The issue of teacher distribution provides a useful analysis. The Indonesia example mentioned above indicates that children in different schools have differential access to teachers. Those in certain urban schools have the greatest access, while those in certain remote schools are deprived in this respect. What is the preferred distribution -- to achieve perfect equality among schools in the ratio of students to teachers? This is what the official formulas in fact prescribe. If the regulations are followed, is equity achieved? Some would say that it is necessary to go beyond the official formulas. These formulas only deal with the children in schools, but what about those who are not in schools? A more equitable approach might be to establish ratios of the total number of school-aged youth in a local area (the potential demand for education) to the supply of teachers. It could even be argued that the system should make up for the historical pattern of discrimination by providing even more teachers to deprived areas than might be implied by a straight ratio of teachers to student population. Deciding on an indicator of equity is clearly a subjective matter.

V. Conclusion: The Implications of Different Priorities

Recent studies of educational effectiveness have tended to narrow the discussion towards equating what happens in schools with the total educational effort, and towards elevating the single priority of educational achievement to a high plateau of concern. Education is concerned with much more than cognitive achievement, and much education occurs outside schools. It may be convenient for the researcher to narrow the debate, but this would tend to reduce the likelihood that other important questions -- i.e., those that are of major interest to the other actors involved in the educational effort -- would receive adequate attention. The new commitment to EFA, with its strong commitment to universal access, should remind all those concerned of the need to broaden their understanding of educational effectiveness.

Chapter Four

COMPONENTS OF EDUCATIONAL INITIATIVES

This chapter will first identify key components of educational initiatives, and then propose procedures for combining these components in effective initiatives.

I. Some Assumptions

Initiatives as Packages

Figure IX introduces a model of the educational system in which various inputs are processed to produce the outputs discussed in the previous chapter. This diagram illustrates how a considerable variety of components combine to constitute the educational process, and also how a number of different offices may have responsibility for these components: a mayor may make decisions regarding which children to send to which schools; a central textbook publisher may produce and deliver textbooks; a ministry of education may hire and deploy teachers; and a ministry of finance may pay their salaries. The diverse origins of these components must be taken into account when designing different initiatives.

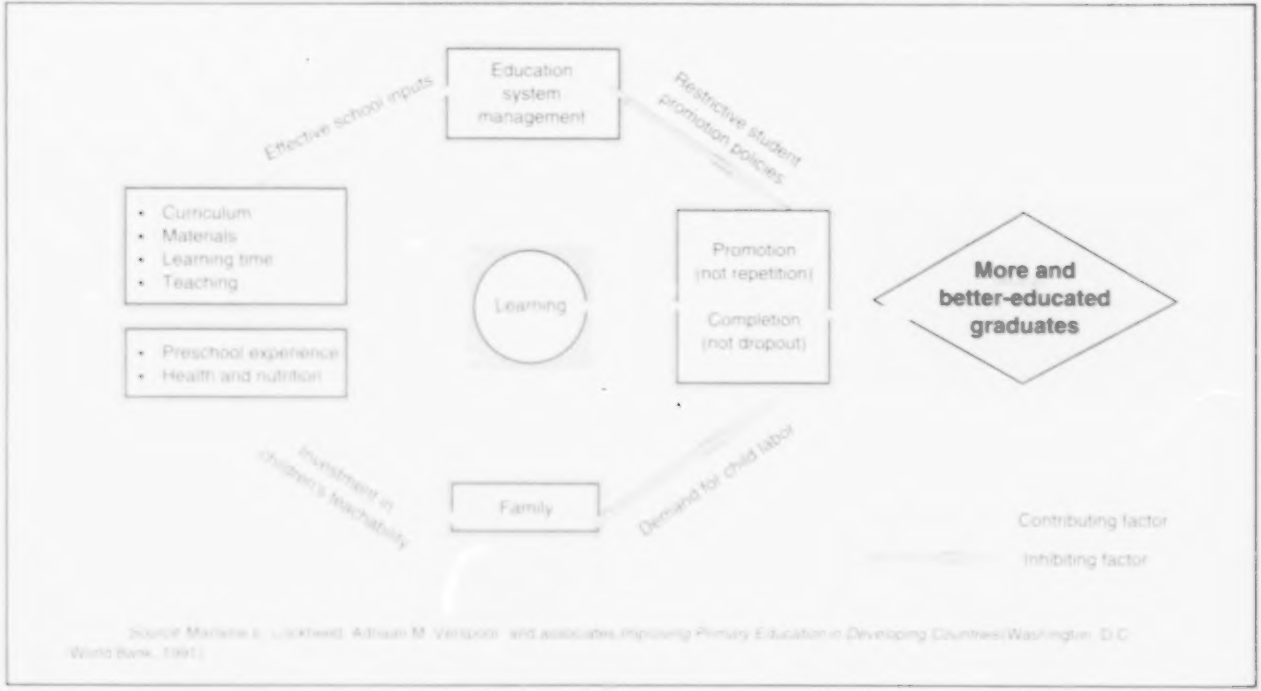
A major purpose of this chapter is to introduce a schema for classifying the various components. Because they originate in different places, it is quite common to propose educational initiatives that focus on specific components such as school construction, teacher training, or curriculum reform. This approach of focusing on a single component is simpler to manage -- and sometimes it works; however, cumulative evidence suggests that a multi-pronged approach is more likely to make a difference. For example, Verspoor and Leno, in a review of World Bank efforts to improve teaching, conclude that projects focusing exclusively on single components (e.g., teacher training, curriculum or textbooks alone) are far less likely to be successful than projects which link these and other components in a package.[34]

In the early 1960s, a group of South-East Asian educators collaborated to develop "IMPACT," one of the most ambitious packages produced in recent decades.[35] These educators, anticipating rapid population growth and a shortage of trained teachers and financial resources, sought to design a new strategy for

[34] Adriaan Verspoor and J.L. Leno, "Improving teaching: a key to successful educational change: lessons from World Bank experience", a paper presented at the Annual IMTEC Seminar, held in Bali, Indonesia, in October 1986.

[35] William K. Cummings, *Low-Cost Primary Education: Implementing an Innovation in Six Nations* (Ottawa, Canada, IDRC, 1986).

Figure IX. A Model of Effective Schooling



Source: Marlaine E. Lockheed, Adriaan M. Verspoor, and associates, *Improving Primary Education in Developing Countries* (Washington, D.C.: World Bank, 1991).

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delivering primary education that would be less costly and less dependent on classroom teachers. The package consisted of three sets of components:

(1) **Personnel**

- An instructional supervisor (in place of the conventional teacher) capable of managing up to 200 primary school students;
- Community members, enlisted on a voluntary basis, to provide instruction (particularly life skills);
- Primary school graduates, provided with modest pay, to give courses in reading and other academic subjects;
- Parents, to take responsibility for motivating their children and monitoring the latter's progress.

(2) **Instructional materials**

- Modular instructional materials, many of them self-instructional, to allow children to proceed at their own pace;
- Instructional radio programme sessions, to supplement written materials.

(3) **Instructional organization**

- Self-paced learning as the primary mode, with individual instruction taking place under the guidance of tutors and the instructional supervisor. Where appropriate, this mode could be supplemented with group sessions;
- A simplification of organizational procedures, with no specific age-entry requirement for the community centre, few set class periods during the first day, no prescribed schedule for completing modules, and no individual grades maintained other than a record of completed modules.

The different components of this initiative were designed to be interrelated. Facilitating self-learning, the innovative instructional materials required a new kind of teacher -- an instructional manager or supervisor who had special skills in managing modules as well as in coordinating the efforts of various assistants in the instructional process. When the several components were jointly implemented, this initiative had a favourable impact, radically lowering costs at the same time. However, weaknesses in particular components (especially in the design and/or supply of instructional materials) limited its overall effectiveness.

Generally, simpler interventions -- i.e., those that are unidimensional, not "small" or low-cost -- are easier to accomplish.[36] However, one of the great development dilemmas is that simpler interventions are less likely to make a difference. Therefore, when starting a new project, it is usually preferable to develop a package of initiatives.

Context and Priorities Shape Packages

Different contexts and priorities will lead to the development of different packages. The IMPACT example described above was originally conceived for areas with rapid population growth and a projected shortage of teachers, with the objective of expanding access under different circumstances. Eventually, the initiative was introduced in six countries, resulting in remarkably different outcomes in terms of both the details included in the package and the educational impact of the initiative. Some of the details of these differences are summarized in table 9.

The differences evolved in two stages. At first, local educators in each nation heard about the original IMPACT idea and decided to adapt it to their local circumstances. During this stage, several countries modified the concept to adjust it to local priorities and contexts. For example, in Indonesia and Malaysia the relative success of the economy led to an expansion of the educational budget, so there was less need to lower unit costs. In Indonesia, a firm national commitment to adult literacy led educators to think of IMPACT as a means both for reaching children and for serving youths and adults who had never completed their primary education.

Once the educators had experimented with the national prototypes, in five of the six cases they sought to diffuse these prototypes to new schools and areas. The initiative was abandoned only in Jamaica due to an initial stage of disappointment. Of particular importance in influencing the impact of the initiative was the structure of the existing educational system in each country: more formal, bureaucratized systems were more resistant; nations experiencing financial stress were slowest to alter budgetary lines that might accommodate the less costly but nevertheless different financial demands of the initiative; and nations whose leadership was characterized by enthusiasm and continuity tended to best promote and support the initiative.

The IMPACT example illustrates how a new initiative often consists of a package that includes several components, how it is not a policy option in the

[36] This qualification is critical. Edward Schumacher and others have effectively illustrated that "small is beautiful". Appropriate technology is generally superior to high technology; however, appropriate technology is usually not simple. It involves multiple components that have been carefully integrated according to prevailing conditions within the local context.

Table 9. A Comparison of the Initial National Prototypes of IMPACT

Characteristics	Philippines	Indonesia	Malaysia	Jamaica	Liberia	Bangladesh
Objectives						
• Lower unit costs	Y	N	N	N	Y	Y
• Improve educational quality	Y	Y	Y	Y	Y	Y
• Reach drop-outs	N	Y	N	N	N	N
Personnel						
• Instructional supervisors replace teachers	Y	Y	N	N	Y	Y
• Community volunteers welcome	Y	Y	N	Y	N	Y
• Adolescent tutor-pupils	Y	N	N	Y	N	Y
• Specialist teachers	Y	Y	Y	?	N	Y
Instructional material						
• Self-instructional modules	Y	Y	N	N	Y	N
• Instructional guides and instructional aids	Y	Y	Y	Y	Y	Y
• Pupil worksheets	Y	N	Y	Y	Y	N
• Radio supplementing written materials	Y	N	N	N	N	N
Instructional organization						
• Integrated instruction of several subjects	Y	N	N	N	N	N
• Periods longer than in conventional schools	Y	N	N	N	N	?
• Classes divided into smaller groups	Y	Y	Y	Y	Y	Y
• Older pupils assist in instructing younger ones	Y	Y	N	Y	N	Y
• Peer tutoring	Y	Y	?	?	Y	Y
• Programmed learning in grades 4 to 6	Y	Y	N	N	Y	Y
• Differential pacing allowed	Y	N	N	N	N	Y

Source: William K. Cummings, Low-Cost Primary Education: Implementing an Innovation in Six Nations (Ottawa, Canada: IDRC, 1986)
Key: Y = yes, N = no, ? = uncertain

classical sense but rather an alternative to the conventional approach, and how its characteristics are likely to evolve over time.

Imitation of Established Packages versus Starting Anew

One way of developing packages is to look at those which have already been tested such as IMPACT, BRAC, *Escuela Nueva*, and ZINTECH. the following pages contain a brief introduction to several of these tested packages. While there is considerable value in studying these established packages, there are a number of reasons why they should not be strictly imitated.

- These packages may be culturally specific.
- Circumstances are likely to vary so widely that it may be necessary to develop distinctive packages.
- Greater collective pride is likely to emerge when the initiative is locally developed.

This chapter is based on the assumption that new packages are better. Still, some elements of a package may already be in place, while others may need to be added. What is important is to be clear on all the essential elements and how they fit together.

The Myth of Policy Options

In both social and educational planning it is fashionable to talk about policy options, or in other words: the specification of several alternative courses of action to solve a problem, with each choice involving different components, implications and costs. Although the language of policy options originated in the arenas of macroeconomic and political planning, it has gradually been utilized in the applied field of human development. For example, a preventive strategy for family planning might focus on education, while another might emphasize one or more of several contraceptive options, each with its respective cost and efficacy level. Still other strategies may combine both elements.

In the IMPACT example, however, reformers in each national context ended up proposing a single option to replace the prevailing system, tried it out, and then modified it accordingly.

In view of the glamour surrounding the notion of policy options, one might question the advisability of this monotonous approach. Is it not preferable to come up with a richer array of options? It may in fact be preferable, but perhaps not possible. An inspection of what are sometimes called policy options reveals that many of them are too general to be of any value to UNICEF Programme Officers, while others are bogus. Two examples are given below.

In a recently completed World Bank review of education in Asia, Jee-Ping Tan and Alain Mingat propose three policy options (1) increasing aggregate spending on education, (2) freeing up resources for primary education, and (3) improving access and retention rates in primary education [37] While Tan and Mingat introduce these actions as options, they are really one-dimensional recommendations In their discussion of increased aggregate spending on education, the authors stick single-mindedly to the benefits of increased spending and do not seriously review alternative options such as voluntary schools or low-cost educational technologies

Indeed, many of the so-called policy options -- particularly those presented by economists -- are of this nature a Government which is doing *x* should do *y* This proposition represents an ultimatum rather than an option The first and second recommendations above would most likely be identified in a Comprehensive Education Analysis, but it should be obvious that they require high-level government initiative and fall outside of the scope of initiative of a UNICEF Programme Officer Finally, it should be noted that the third recommendation was already described in chapter three as a priority rather than a policy option

Another example is Mary Anderson's well-known analysis of access to education [38] Anderson first identifies a number of barriers to access such as inadequate space, excessive distance, high cost, insufficient teachers, and inappropriate curriculum, she then outlines policy options to address each of these barriers (see table 10) A few of the proposed options seem highly impractical, however, and may be offered so that the author can maintain a semblance of symmetry For instance, to address the problem of inappropriate curriculum, Anderson suggests either adjusting the curriculum or inducing parents to accept the inappropriate curriculum The point here is not to criticize Anderson's thoughtful paper, but rather to point out that sometimes there may be only one option, and there is no need to complicate matters by enumerating other alternatives unworthy of serious consideration

Once a diagnosis of the disparities and their causes has been made, options for removing access barriers become clear, and an effective policy package can be devised The language of policy options has so captured the imagination of educators that those who are unable to propose a range of options for addressing

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[37] Jee-Ping Tan and Alain Mingat, *Education in Asia: A Comparative Study of Cost and Financing* (Washington D C World Bank, 1992) While most of the options probed in this study are macro-level and do not have clear implications for the improvement of primary education, an interesting exception is the student-teacher ratio The authors note that several Asian systems have relatively high student-teacher ratios as well as high internal efficiency and mastery They propose that greater attention be given to the Asian approach to school and classroom management

[38] Mary B Anderson, "Policy options for improving access to education," *Journal for Advancing Basic Education and Literacy* 1 (June 1991) pp 3-6 and 11

Table 10. Educational Access: Barriers, Policy Options and Solutions

Barriers	Policy options	Examples
Space	• Provide more space • Use existing space efficiently and/or equitably • Use alternative locations/spaces as schools • Provide education at home	• Build schools, designate for certain groups • Double shifts, designate for certain groups • Community buildings, mosque schools • Distance education
Distance	• Reduce distance between home and school • Provide safety on the way to and from school	• Build more schools, use existing spaces, educate at home, use boarding facilities • Provide transportation, chaperons, community protection
Cost	• Make financial/in-kind adjustments • Make time and/or labour adjustments • Improve expectations of returns on education	• Provide free education, free textbooks and uniforms, scholarships, and incentive payments to parents for children's participation in schools • Change school timing so it will not conflict with labour, substitute for children's labour during school hours • Ensure access to higher education, make training relevant to employment or increases in productivity
Insufficient and overburdened teachers	• Recruit/place more teachers • Teach more students with the same number of or fewer teachers • Provide incentives to teachers to encourage the enrolment of disadvantaged groups in school (i.e., to come and to stay)	• Lower entry requirements, improve incentives, provide training locally, place teachers near home • Double shifts, self-taught, programmed curricula, peer instruction, distance education • Direct rewards for teachers who succeed in enrolling children from disadvantaged groups
Inappropriate, undesirable education	• Adapt the education system to fit parents' sense of appropriateness • Overcome or change parents' understanding	• Adjust curriculum, build or renovate facilities, recruit different teachers • Legal sanctions, acceptable alternatives, community involvement, parental education

Source: Mary B. Anderson, "Policy options for improving access to education," *Forum for Advancing Basic Education and Literacy* 1 (June 1991), pp. 3-6 and 11.

some pressing problem sometimes feel inadequate. Do such educators lack imagination? Are they poorly informed? Possibly -- but it may also be that they work within a set of real-life constraints that armchair planners in the big cities never see. They know that whatever they propose must also be liked by the communities where the option(s) will be launched, and that their budgets and skills are limited. In view of all this, their planning is frequently carried out through a series of discussions with those who are going to be involved. Often the situation they face is so peculiar or complex that (at least initially) their thoughtful group comes up with only one sound initiative. Or it may be that the consensual process leads to a focus on one approach that all can agree on, so that other options are relegated to the waste-basket. That first cut might be launched as a pilot project, to be modified and diversified as the innovators become more familiar with the context. This approach to change is sometimes called "rolling planning", in the sense that progressive interaction with the field suggests various modifications or options (options *a l'experience* rather than a priori) that fit the context.

II. A Taxonomy of Components

When educational planners are thinking of developing a package or even launching a more limited initiative with a single component such as school lunches or the distribution of free textbooks, it is useful to have a schema of group components and to indicate their relationship.

In this case, an analogy to a nutritionist can be made. In planning meals for clients, nutritionists seek to offer a balanced diet by choosing items from the several established food groups. Selections within each group are somewhat "optional", influenced by relative cost, availability, and people's tastes -- but an effective diet is not possible without the full range of groups. The nutritionist's work is facilitated by the long-established taxonomy of food groups.

Past efforts. The field of education could use a schema similar to the nutritionist's food groups. Several have been proposed, perhaps the most famous is Benjamin Bloom's *Taxonomy of Educational Objectives*, which relates various elements of the curriculum to intended cognitive, behavioural and attitudinal outcomes. Most of these schemata cover only a limited part of the overall educational endeavor, however. In their recent studies of primary education, Lockheed and Verspoor and Windham provide more comprehensive schemata, as summarized in table 11.

Table 11. Major Components of Primary Education Identified in Recent Studies

Lockheed and Verspoor	Windham
Family Health and nutrition Preschool experience	Student
Curriculum Materials	Facilities Alternative technologies Instructional materials and equipment
Instructional time	Use of teacher's and student's time
Teaching Education system management	Forms of instructional organization

Sources: Marlaine E. Lockheed, Adriaan M. Verspoor, and associates, *Improving Primary Education in Developing Countries* (Washington, D.C.: World Bank, 1991); Douglas Windham, *Indicators of Educational Effectiveness and Efficiency* (Paris: UNESCO - International Institute for Educational Planning, 1989); and Douglas Windham and D.W. Chapman, *The Evaluation of Educational Efficiency: Constraints, Issues and Policies* (Greenwich, Connecticut: JAI Press, 1990).

As can be seen in the table above, there is a modest degree of overlap in these lists. Lockheed and Verspoor, who primarily concentrate on components shown to have a measurable impact on student achievement, place greater emphasis on student entry characteristics and the instructional process; as school facilities have no measurable effect, they are not included in the list. Windham, who is concerned with the development of statistical indicators that can be reliably collected by school systems, places more emphasis on tangible components such as facilities and materials. Both lists do converge in the specification of certain inputs from the community and from the established authorities, and on the dynamics of the school and classroom processes.

While merging the two lists brings one closer to the groups of components identified in figure IX, neither list provides much detail that might be included under the components' respective headings. Various other lists have been consulted, though all of them have certain shortcomings deriving from the compilers' limited perspectives.

An inductive approach. In order to develop a more comprehensive list of educational components, the present authors decided to engage in an inductive approach. First, a group of six senior educators with experience in all the major regions of the world was formed. With the assistance of several researchers, this

group compiled a list of nearly 200 primary education initiatives that had been launched in the third world since the mid-1960s and that were well regarded. After examining each one of these initiatives, it was possible for the group to establish a list of 67 key elements.

The elements were grouped in various ways, finally evolving into eight major groups (see table 12), the selection of the groups was in part shaped by proposals relating to the components featured in table 11. The pupil-family-community group is presented first (in the view of the present authors) as the foundation of all education. At the very least, the family and community provide pupils for the formal educational system. In some settings, the pupil is well-fed, has attended kindergarten, and has access to community learning activities after school. Where these components are not prevalent, they may become the focus of new initiatives.

The next several groups focus on inputs normally provided by those who establish schools -- inputs such as buildings and facilities, teachers, curriculum, and instructional materials. The schema then identifies two process areas: instructional methods and management-supervision. Finally, issues of finance are addressed. This grouping conforms to the basic input-process-output logic common to most current educational taxonomies.

An additional consideration in establishing the eight groups was their rough correspondence to the major divisions and sections in many education ministries. Looking, for example, at the organization of the Japanese Ministry of Education, one finds that it has respective divisions or sections for facilities planning and facilities aid, personnel, teacher training, curriculum planning, textbooks, other learning resources, school inspection, and budgeting and accounting. These government offices correspond to all of the major groupings in the proposed schema (with the exception of the pupil-family-community category). It is not uncommon for government officials to ignore community relations, but in the schema proposed here it is the first major group, as it is believed (by the present authors, among others) to provide the foundation for effective education.

This inductive exercise yielded a rich two-level taxonomy of educational components. It is suggested here that virtually any component the reader has ever considered for primary education is located in one or another of the groupings or subgroupings that constitute this taxonomy.

The SHARE database. The schema described above has been used in the development of a user-friendly database which includes the aforementioned reports on various initiatives and the related research that examines their efficacy. This database, described in more detail elsewhere, may prove of use to Programme Officers in planning initiatives (see table 12).

Table 12. SHARE Goal-Policy Framework

POLICY OPTIONS

Pupils-Family-Community

1 Provision of information
2 Preschool administration program
3 School administration
4 Selection of pupils
5 Pupils' home environment
6 Involvement
7 Pupils' nutrition
8 School discipline
9 Supplementary schools

Facilities and Equipment

1 School store
2 Grades in a building
3 Building design
4 School location
5 Instructional facilities
6 Other facilities
7 Space utilization
8 Furnishings
9 Office equipment

Teachers

1 Selection and characteristics
2 Development and commitment
3 Working conditions
4 Training
5 Teachers' abilities
6 Job satisfaction/morale
7 Use of peer tutors/lead residents

Curriculum

1 Objectives
2 Coeducation
3 Key schools
4 Curriculum trading
5 Co- and extra curriculum
6 Official curriculum
7 Practical courses
8 Allocation of time
9 Language-of instruction
10 Exams and extra research

Management and Supervision

1 School level
2 Clusters and subregional networks
3 Regional/national level
4 Management information systems and planning
5 Research
6 Teacher's union

Instructional Technology

1 Radio
2 Textbooks
3 Instructional TV
4 Computers
5 Correspondence education
6 Programmed teaching/learning
7 Other technologies
8 Design and production

Instructional Methods

1 Teaching/learning styles
2 Class schedules
3 Opportunities
4 Field trips
5 Pupil grouping
6 Use of student tutors
7 Homework
8 Class size
9 Classroom management

Finance

1 Efficient use of resources
2 Private schools
3 Tax base for public education
4 School fees, tuition
5 Renting facilities
6 Community contributions
7 Privatization of school services

Source: William Cummings and Florence Kiragu, "SHARE systems to help access reports of effective education", *Forum for Advancing Basic Education and Literacy* (January 1992), p. 14

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The database consists of concise abstracts of reports and research findings for several hundred initiatives that have been launched around the world, and it is being continuously augmented with new abstracts. Each abstract is classified according to two main considerations: (a) the major educational components packaged in the initiative, and (b) the priorities or goals addressed, which are drawn from a list of five priorities that closely correspond to the UNICEF priorities discussed in chapter 3, and include access, quality (mastery), values education, external efficiency (relevance), and internal efficiency.

III. Comparing Groups of Components

One concern in designing educational endeavors is gaining some sense of the relative benefits and costs of different interventions. This concern requires some preliminary comments about the groups.

Benefits. The systemic nature of education means that any given component is likely to have multiple effects. Moreover, much that happens in education is related to factors which exist outside schools and which lie beyond the control of school personnel.

Despite the openness of the education system, it is possible to advance some tentative generalizations about the components. For example, drawing on the above taxonomy and database, the aforementioned group of six educators was able to cross-classify each initiative in terms of both its constituent components and the impact of these components on the several priorities. This cross-classification was, of course, complicated by the fact that most of the initiatives were packages that had to be entered under each of the components they included. Additionally, many initiatives were designed to satisfy more than one priority, again, the intiative received a new entry for each priority. There was thus extensive double counting, and while there were only 200 initiatives, the database contained nearly 1,000 entries.

Table 13 presents a summary of the cross-classification of components by priorities. While the data have been aggregated here at the group level, the original tabulation was made at the level of specific components. Several interesting conclusions emerge from this latter tabulation.

- Effective initiatives involve components from all of the groups, so it would be wrong to draw extreme conclusions -- for example, that curriculum or facilities are not important components in the improvement of primary education. All of the major groupings are important. The hard evidence on what works seems to contradict Lockheed and Verspoor's position that facility and curriculum reform are "dead ends." It may just be that benefits vary according to the priorities and the context.

Table 13. The Priorities with the Strongest Links to the Eight Policy Groups

Policy groups	Priorities
Community	Access Relevance
Facilities	Access
Teachers	All
Curriculum	Relevance Values Learning
Materials	Learning
Methods	Learning Values Internal efficiency
Management	Learning Internal efficiency
Finance	Access

Source: SHARE. Project Abel. Harvard Institute for International Development (HIID). (Cambridge, Massachusetts, 1992)

- Most initiatives consist of packages that are spread over several groups, so it cannot be said that any particular group is critical for realizing a certain priority
- While no policy group is overridingly important or the sole means to addressing specific priorities, according to the literature available through SHARE, teachers and curriculum are the heart of the matter because they have the broadest impact. The other components fit in more specialized ways

Costs. There have been many attempts at developing a taxonomy of educational components, but each of them has been found wanting in some respect -- undoubtedly revealing the complexity of the educational enterprise. One advantage of the schema presented here is that it reflects, at least to some degree, the way educational systems are organized, which allows something to be said about the relative cost of drawing components from the respective groups.

Many ministries report expenditures by categories similar to those in the schema presented here, so in a given national context it is possible to find out how much is spent on teachers, textbooks, and other components. Unfortunately,

because these data are not widely available, they will not be discussed here in detail. Suffice it to say that the major expenditure category in most national settings is teachers' salaries, with buildings and facilities a distant second and all others receiving only modest allocations.

What is known about expenditures is discouraging. Teachers' salaries tend to be locked into an established scale, as most of them are on fixed-salary schedules. However, as the IMPACT example indicates, there exist many ways to change the teachers' role, thereby (presumably) making it less costly.

Textbooks, in contrast, constitute a low-cost area. One teacher's cost is equal to at least 50 textbooks -- but usually more. In spite of this, most Governments spend little on textbooks, and current amounts are even decreasing. Along with textbooks, there are many other promising options for learning technologies. For example, as Lockheed points out, radio is both relatively inexpensive and effective. When carrying out an evaluation, it is just as important to look at the impact; it may make sense to spend a considerable amount of money on a particular input if it is going to make a critical difference.

Remembering the horizontal dimension. Much of the information available on schools derives from statistical averages relating to large numbers of schools or to schools with favourable circumstances. However, it is known that the conditions faced by remote schools on the periphery of many societies may be vastly different from these average situations. Remote schools may not have buildings, or they may have exceptionally high student-teacher ratios, and their principals (who usually teach a full load as well) may lack formal training in school management. It may be the case, as the literature seems to suggest, that the addition of new facilities or even teachers may not make that much of a difference to an ordinary school, but these resources may be critical for schools in remote areas. Therefore, as new initiatives are thought of, it is always important to recognize that in view of the biases in past data collection, what is known may not be the best guide to what should be done.

IV. Conclusions

In terms of what goes in or what comes out, there are two directions to follow in discussing initiatives.

Many of the recent efforts (Windham, Lockheed and Verspoor) focus on what comes out, differences in their relative emphasis on access and learning lead to the differences in the initiatives highlighted above. In focusing on what comes out, these discussions tend to assume that what goes in is universally obtainable. However, an approach that pays equal attention to what goes in is likely to be more sensitive to the availability of these inputs.

It can also be said that most of the recent policy volumes have minimized the importance of context. They tend to move straight to the "silver bullets" without giving much attention to whether particular components fit a particular context. There are great differences in the various areas within a community structure -- e.g., matrilineal versus patrilineal social organization, tight, extended families versus nuclear units, and small landowner settings versus plantations. Each of these contexts opens up different possibilities and introduces unique constraints on the types of educational initiatives that can be undertaken. There will be an attempt in the following chapters, as different "policy options" are explored, to analyse how these relate to different contexts.

What is proposed here is to look more carefully at the various components and relate them rather loosely to their expected impact. The next chapters will therefore review what is known about the components as a background for the concluding chapters, which will in turn consider how to put them together.

Chapter Five

POLICIES TO IMPROVE ACCESS AND EQUITY

More than 100 million children, including at least 60 million girls, have no access to primary schooling [1]

Providing opportunities for all children to acquire basic learning skills is the most urgent task of EFA. The World Declaration on Education for All states that "basic education services of quality should be expanded, and consistent measures must be taken to reduce disparities". The strategic planning framework introduced in earlier chapters is a useful tool for addressing this challenge.

I. Sharpening the Focus

The Context of the Access Challenge

The record of new States in developing modern educational systems, and especially in extending these educational services to the periphery, has been checkered. Factors such as inadequate resources, ethnic rivalry, linguistic differences, inhospitable geography and lax government policy often account for the failure to promote access (see chapter two). Table 14 lists those countries which are particularly poor in promoting access to education in general, as well as those where there are large gender differences in access. It should be noted that most of these countries are in South Asia and Sub-Saharan Africa.

A recent UNICEF-sponsored analysis of education in Africa proposed an initial breakdown of national enrolments into three groupings, as mentioned before. To reiterate: "Group A represents the group of countries with net enrolment rates below 50 per cent, B those with net enrolment rates above 50 but below 70 per cent, and C those with net enrolment above 70 per cent." [2] Further breakdowns within these groups might take account of administrative and other contextual features. The main thrust of the UNICEF analysis is to propose different "packets" of reforms for the respective groups, with the first group receiving the most complete packet.

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[1] World Conference on Education for All (WCEFA), held in Jomtien, Thailand, from 5 to 9 March 1990: *World Declaration on Education for All*. (New York, Inter-Agency Commission: UNDP/UNESCO/UNICEF/World Bank, 1990).

[2] Frank Dall, "Basic education: an investment in a better African future", in *Africa's Children, Africa's Future: Background Sectoral Papers* (New York, UNICEF/OAO, 1992).

Table 14. Countries with the Lowest Gross Enrolment Ratios (GERs) and the Largest Gender Gaps in First-Level Education (circa 1988)

The 10 countries with the lowest GERs	Male GER	Female GER
Somalia	20	10
Mali	29	17
Bhutan	31	20
Afghanistan	33	17
Niger	38	21
Burkina Faso	41	24
Guinea	42	19
Liberia	43	24
Ethiopia	44	28
Sudan	48	41
The 10 countries with the largest gender gaps	**Male GER**	**Female GER**
Former Yemen Arab Republic	140	42
Nepal	112	57
Togo	124	78
Chad	73	29
Benin	83	43
Guinea-Bissau	69	37
Central African Republic	83	41
India	114	83
Morocco	80	53
Gambia	75	48

Source: UNICEF, *Strategies to Promote Girls' Education: Policies and Programmes That Work* (New York: UNICEF, 1991).

Countries in Group A (see box 8) tend to be characterized by all the factors that have been identified in the present cross-national review, whereas those in Groups B and C are generally characterized by only one or two.

Supply or Demand?

Among the different factors known to influence access, some are said to have a greater impact on the supply of education, while others have a greater impact on the demand. For example, Governments experience greater difficulty in supplying schools to rural areas, particularly where the population is highly dispersed. Similarly, Governments with modest or shrinking educational budgets are unlikely to have funds for the construction of new schools or the recruitment of teachers.

Box 8

Pakistan: A Good Example of a Type-A Country

Pakistan is a large country with a population that is widely dispersed – particularly in the Sind and Baluchistan provinces. Over 85 per cent of the people live in rural settings, and significant numbers live in the relatively rugged terrain of the Hindu Kush and Himalaya foothills or in the Sind desert. Islam is the religion of most Pakistanis, and is recognized as the State religion. In rural areas, the practice of Islam often leads to a sharp separation in gender roles, and places a number of obstacles in the way of young girls attending schools or of single women taking up teaching assignments. Women are expected to marry early and produce large families; the population growth rate exceeds 3 per cent annually.

Despite the common bond of Islam, the nation is composed of numerous tribal ethnic groups that have long-standing rivalries. To some degree these rivalries are politically contained through a federal system of Government which allows considerable autonomy to local governments, but the capacities of the respective areas for generating revenue vary. Additionally, the most rural and backward have the weakest tax base and hence the lowest capacity for developing basic education. The central Government tends to be dominated by the numerically more dominant Punjabis, who do not always promote policies that favour other groups. Perhaps the most pressing concern of the central Government has been the strengthening of national defence against the presumed threat from India (and until recently from the communist Government in Afghanistan), with over half the central Government's budget going for defence, relatively little is left for education.

Source: UNICEF, "Pakistan situation analysis" (Islamabad, UNICEF).

Myron Weiner, in his study of access to education in India, notes how indifferent government policy may also be responsible for inadequate supply. Weiner illustrates this with quotes from interviews he conducted with key government officials. An important senior official working on the National Policy for Education makes the following observation:

> *I think that by and large the people of India want their children to be educated, so we do not need coercive power to send their children to school. Besides, what right do we have to compel parents to send children to schools that are not worth much. The teachers aren't any good. Often they don't even appear at the school. We must first provide the country with schools that are worth something. Right now our schools are trash.*

Similarly, the Director of the National Institute of Public Cooperation and Child Development argues:

> *Look at the tribal children, for example. They have a tradition of learning crafts at home. But once we put them into school they won't go back to their own culture to learn their crafts. This new culture we teach in the schools has given them nothing. They can't even get a job as a peon. The problem is that the schools pull the children out of their own culture. If these low-income people had a chance, they would send their children to school to get degrees rather than learn the family craft. But that would be a mistake because then we would have more educated unemployed. Schools just add to the ranks of the unemployed.* [1]

On the demand side, there are factors such as the rural agricultural economy, which is characterized by a high valuation of child labour by families and a degree of uncertainty about the benefits of schooling, a low rate of economic growth which leaves much of the population with little disposable income, and cultural norms that may lead families to withhold girls from schools. Where parents are reluctant to send their children to schools, it is not uncommon, as Chitra Naik observes, for school officials to selfishly support this parental indifference:

> *The majority of these children (children from tribal and poor, rural families) evade the compulsion laws simply by enrolling in a nearby primary school, with hardly any intention to attend. The teachers usually connive at this stratagem since it is convenient for them to show large enrollments on paper and actually have a small attendance in class. This enables them to send to the "higher authorities" good reports on the spread of primary education, while their routine teaching load remains light. Such an arrangement is mutually convenient for everyone concerned, i.e., the children, parents, teachers and even education offices where the "coverage" shown by enrollment statistics matters for the preparation of progress reports. The names of a few non-attending children are struck off the attendance register every now and then, thus satisfying the given regulation by token. The inadequate communication facilities in the tribal and rural areas prevent adequate*

[1] Myron Weiner, *op. cit.*, pp. 57 and 76.

personal supervision and lead to dependence on reports which cannot be easily verified [42]

Generally, countries in Groups B and C of the UNICEF schema -- especially those in the latter group -- suffer from a demand problem, they have the schools, or at least the resources to provide them, but they have not worked out an approach that motivates the children to attend. In developing a national strategy, it is important to stress initiatives that fit the national context. In other words, a full package may be required for countries in Group A, while for countries in Groups B and C the package might need to be more targeted. As a variety of specific initiatives that are known to influence access are reviewed here, one will want to keep in mind their potential impact on both supply and demand.

Regional Variation

Of course, national rates encompass much internal variation. As noted earlier, enrolment rates are comparatively low in India as a whole, but are very high in the State of Kerala (nearly all children enrol in the primary grades, and 88 per cent of the age cohort are enrolled in secondary schools, so Kerala has a literacy rate of 70.4 per cent, or twice the national average). [43]

The situation in India is paralleled in other nations. In Indonesia, enrolment in the primary cycle of basic education is close to 100 per cent in every province, but at the junior secondary level the enrolment rate varies from 36.5 per cent in West Java to 81.9 per cent in Bali. [44] There are thus not only rural-urban distinctions within nations, but also important regional differences that require examination. In a single country, some provinces may require type-A approaches, while others, such as Kerala or Bali, fall into the type-B or type-C category.

Access Options

As is the case with all the priorities one might consider, a wide range of innovations can be mobilized to improve access and equity. It is known from the previous chapter that the innovations that have proven most successful in enhancing access tend to involve the following:

- The construction of new facilities
- Inducements to attract and retain capable teachers

[42] Chitra Naik, "An action-research project on universal primary education", *Indian Institute of Education Bulletin* 2 (1981), pp. 137-158.

[43] Myron Weiner, *op. cit.*, p. 175.

[44] Indonesian Ministry of Education and Culture, Centre for Informatics, *Educational Indicators Indonesia*, (Jakarta, Centre for Informatics, 1990).

- Greater community involvement
- More sensitive management
- Increased financing for primary education, including new support from both Government and parents

Innovations focusing on facilities and teachers primarily alter the supply side, whereas innovations in the latter groups, focusing on questions of organization and sponsorship, can influence both supply and demand. In the sections below, each of these groups of options will be presented in some detail.

II. Facilities

New school buildings. In Group A countries, one of the most important constraints to access is the lack of school buildings. For example, there are no school facilities within a 50-kilometre radius in some rural areas in Yemen and Sudan, though there are children residing more or less permanently in these areas, nor are there any alternate public facilities for education. Under these circumstances, illiteracy is inevitable.

In areas where there are no schools, the classic solution is to build new schools. Some Governments have sufficient information on how many children live in various areas and the number of established schools to make estimates about the number of required facilities. While public school facilities may not be available, in some of these areas there may be mosques or other community structures. In Pakistan, the wide prevalence of mosques, even in the most remote places, has encouraged the development of a mosque school programme involving the construction of modest additions to mosques so that children can come for basic education (see box 9). The authority of the local imam is relied upon to attract the children, and sometimes he may even take responsibility for teaching them.

Location of schools. Simple formulas may lead to estimates about the number of required schools, but locating them is a more complex matter. In the late 1960s, when Indonesia began to address its access problem with a major school-building project known as *sekolah inpres*, the early decisions on school location were entrusted to officials from the President's office. Seeking to enhance the President's prestige, these officials began to place the new *inpres* schools in the central areas of each village. They gave little consideration to the location of existing schools, which were often no more than 200 metres away. Parents gladly sent their children to the President's schools, and the existing schools were emptied. Access was not affected.

Box 9
Mosque Schools

Many parents have concerns for both the physical and the moral safety of their daughters in formal school environments, and the travel required to locations outside the home village compounds those fears. Using the local mosque as a school has been a solution which is attractive to parents. It takes into account distance, space and cost by utilizing existing facilities which are found in every village. The reduction of travel to and from home is a major benefit to girls whose attendance is more affected by this factor than boys. The utilization of a religious setting in combination with the presence of an imam as a co-teacher addresses the safety needs of girls and the concerns of parents. In Bangladesh, Sudan, Mali and Pakistan, the Governments have supported the accreditation of these schools by introducing secular school curricula and trained teachers to supplement the religious education.

Source: M. Anderson, "Policy options for effectively addressing problems of educational access" (mimeo), Project BRIDGES, Harvard Institute for International Development, Harvard University/United States Agency for International Development (Cambridge, Massachusetts, December 1990).

A variety of procedures are available for planning school location more effectively (see box 10). The simplest procedures involve the mapping of existing schools and the identification of areas where schools appear relatively scarce. areas or zones may be specified, taking into account the location of residences, the degree of mobility (i.e., roads) and the obstacles imposed by rivers and mountains. More sensitive techniques build on this objective information through consultation with local officials and community leaders. The underlying principle is to build schools where the people are.

School design and scale. Centrally planned programmes for building schools have often begun with the premise that a commitment to a common school design is the most efficient approach. If all locations get an identical school, the centre's supply task is simplified: send out 10 beams, four bags of cement, 120 desks, and so on, or if the case merits, double the order.

Much has been said and written about the most practical school design. At one time, UNESCO promoted the "half-wall school" design, pointing out that it was stable and provided protection against desert storms and monsoon rains while also providing adequate ventilation and natural lighting.

Box 10
Choosing School Locations

There are excellent aids to assist in the planning of school locations (e.g., Gould, 1978; Hallak, 1977). However, there is a scarcity of aids to help in obtaining sites on which to locate buildings. Most work on location planning or school mapping has focused on how to locate schools to respond most effectively to the distribution of potential students.

Cost is undoubtedly a major factor in the selection of sites for schools. Land costs are a major contributor, but preparation costs may also be high – for example, when the land has an unsuitable subsoil and is subject to flooding.

A second factor is the access of the client population to schools. The problem is most serious for primary grades and in rural areas where students are widely scattered. Time and mode of travel to school have been shown to affect regularity of attendance (for both teachers and students); they have an indirect effect on the amount of learning.

Recommended distances and time durations vary according to the urban or rural nature of the site, age and gender of the students, and level of violence. A current rule of thumb is that no child should have to walk more than 1.5 kilometres to reach a primary school.

When land is not available for schools, educational planners have shown great ingenuity in redesigning programmes and buildings. In crowded urban areas, schools can be built vertically, that is, with multiple floors. Playgrounds can be located on roofs, or in central areas accessible by transport. Similarly, workshops and laboratories can be concentrated in school clusters in rural areas (Cummings, 1992).

Source: William K. Cummings, G.B. Gunawardena, and James H. Williams, "The implementation of management reforms: the case of Sri Lanka", *BRIDGES Research Report Series No. 11* (Cambridge, Massachusetts, Harvard Institute for International Development, February 1992).

While the "one best design" has its merits, many of the remote locations that are most in need of school buildings may have special requirements. The number of children attending schools in these areas is often relatively low. Many pedagogical responses are suggested for such a circumstance. For example, children might be admitted only every second year so as to expand the size of entering and continuing classes. Boarding schools might be constructed, so that children from greater distances can attend. Perhaps the most common approach, however, is the small school, with children of several grades sitting in a common classroom with movable partitions. The advantages and disadvantages of this approach are listed below.

Advantages and Disadvantages of Multi-Grade Classrooms

C. Thomas and C. Shaw relate the following advantages of multi-grade classrooms:

- They constitute an efficient means of providing basic education in sparsely populated areas.
- They are an efficient means of utilizing scarce educational inputs such as trained teachers, classrooms, and materials.
- Multi-grade students can attain higher achievement levels than single-grade students, especially in math, language and sciences.
- Maintaining rural schools is important in building village identity and cultural awareness.
- Multi-grade schools can benefit girls by expanding available school spaces and by helping to ensure that schools are located closer to home.
- Students "learn to learn" and "learn to teach" through independent inquiry and peer tutoring.
- Individual students and teachers develop a strong relationship over time, which in turn helps the teacher assess students and adopt appropriate teaching strategies.
- Students benefit from the unique multi-age and peer socialization patterns existing in multi-grade classes.
- The stigma associated with repetition is removed.

The same authors note the following disadvantages of multi-grade classrooms:

- Student achievement may fall if programmes are not supported by the required resources and teachers are not properly trained.
- Demands on teachers' time and organizational capabilities are high, so they need special training and materials to perform their jobs effectively.
- Students may receive less individual attention and must often work independently.[45]

[45] Christopher Thomas and Christopher Shaw, "Issues in the development of multi-grade schools" (draft) (Washington, D.C.: World Bank, September 1992).

Educational systems that decide on the small-school, multi-grade option should support it with a variety of interrelated policies in areas such as finance, instructional materials, and teacher training. They must also develop an approach for constructing special buildings for small schools, possibly setting up only two or three classrooms where new pedagogical styles are carried out. The climate in these remote areas may be exceptionally severe, necessitating other modifications. Finally, it may be important to provide accommodations for the teachers, as they may not come from the local area. In such cases, the "one best design" would be inappropriate.

Diversity of school design should receive especially high priority in Group B and C countries. In these countries, children who live in the central and more densely populated areas are well served; the major remaining challenge is to reach out to the special communities in remote areas to provide them with meaningful opportunities.

Controlling cost and ensuring quality. Centrally initiated programmes are often implemented through local engineering units of either the education or a related ministry. Where the construction is top-down, the local units will follow the common design with no accommodation to local concerns. In the Indonesian *inpres* programme, the first batch of schools was constructed according to this top-down formula; however, some of the later batches took a different approach by subcontracting with either local governments or local firms. Subcontracts with local firms tended to result in shoddier construction that did not last as long; in contrast, subcontracts with local governments often led to a complementary mobilization of local involvement. In many cases, community leaders introduced modifications to the central design which took into account local cultural preferences; for example, wood beams might be added or the roof might be altered to slope upwards in the same way as the more stylish local houses. In addition, the schools subcontracted to local governments tended to be constructed with the best materials and lasted the longest.[35]

Indonesia's Ministry of Education contracts with local contractors or communities for the construction of primary schools currently have a price tag of about 30 million rupiah (US$ 15,000) each. Parallel to the Ministry of Education's school system is an Islamic school system where buildings are largely constructed through contributions by local communities; a rich farmer may offer land, and others may offer materials, labour, and/or cash contributions. A recent report indicates that a typical school building constructed in this manner costs in the neighbourhood of 10 million rupiah -- one third the cost of a Ministry of Education building. This finding has been verified in other national settings

[35] Donald Snodgrass, *Inpres Sekolah Dasar*, Report No. 5 (Jakarta, Center for Development Program Implementation Studies, 1984).

as well. Clearly, in areas where the community is committed to basic education, there are considerable advantages in promoting Government-community partnerships for the construction of school facilities (see box 11).

Box 11
How Much Should Be Spent on School Construction?

If students learn as much in inexpensive school buildings as they do in expensive buildings, then less expensive schools should be built. Saved resources can be used to expand access, or to improve quality. Data from the World Bank (Lockheed and Verspoor, 1989) indicate that in Sub-Saharan Africa, schools built with local materials cost only one third as much as schools built to "international" standards, as the following table shows:

Cost per Student Place for Local International Construction Materials (US dollars)

Country	*Brick and mortar*	*Local materials*
Senegal	593	175
Central African Republic	478	176
Burkina Faso	549	203
Mauritius	355	183
Chad	460	156
Mali	417	226

At most, there is only very weak evidence that the quality of building makes a difference in learning. Although some sort of building is necessary for a school to operate effectively, many studies show little or no relationship between (a) student learning and (b) the type of construction, the amount of ventilation and illumination, the physical condition of the roof, and the walls or furniture (Fuller, 1987). For example, in Pakistan researchers found no difference between schools with high scores on external achievement tests in mathematics and science and those with low scores, with respect to the condition of the buildings and whether children had desks or chairs (Warwick and Reimers, 1991).

Perhaps other factors are much more important in producing student learning. For example, suppose that the difference between effective and ineffective teachers is very large -- much larger than the effect of buildings. Suppose also that teachers are assigned randomly to buildings. In this case one would see only the effect of teachers.

A few studies do report that the quality of the building makes a difference (Mwamwenda and Mwamwenda, 1987). It may be that in these studies, teachers are assigned according to the quality of the building, and that what is really being observed is the impact of effective teachers.

Teachers' quarters and other amenities. A major obstacle to providing schooling in remote areas is the shortage of teachers willing to work in these areas due to the lack of housing. To counter this problem, some school-building schemes include the provision of modest housing for the teachers. Locating teacher housing on the school campus also means that teachers can serve as night watchmen or watchwomen for the facilities. However, therein may lie a major problem: a scheme in Pakistan to provide such teacher housing proved a colossal failure, as teachers -- many of whom were young and female -- refused to live in the houses because they feared that they might be raped in the evening or that people might spread rumours about their motives for living alone in the country.

An alternative to building teachers' houses in isolated school settings might be to construct them in villages, adjacent to the homes of responsible local families. Perhaps other approaches to the issue of teacher scarcity (to be summarized below) deserve consideration as well. What is apparent from this example is the importance of taking local cultural norms into consideration when planning school construction programmes.

Pooling instructional resources. The "one best school design" premise is based on the belief that every child should be provided a uniform education, and hence, that every school should have a sufficient range of resources (e.g., a fully equipped science room, a nice playground, and a modest library) to provide that education. To justify the fully equipped school, architects typically design a school that will accommodate at least six full classes, or upwards of 200 children. However, in recent years a number of countries have successfully experimented with a different approach, establishing a group or cluster of smaller schools that coordinate activities and sometimes even draw on a central learning resource centre for some common needs. In Thailand, the resource centre is staffed with an instructional expert and has a generous library and stock of instructional aids. In some Sri Lanka clusters, the central school provides the locale for intramural sports and cultural events.

Smaller schools may allow for a placement of buildings whereby each is closer to more children, thus easing the burden of attendance. Other benefits may include the possible specialization of schools by gender, by ethnic or language group, or even by curricular emphasis (e.g., a vocational constrasted with an academic focus).

III. Teachers

Even when schools have been built, Group A countries often lack a sufficient number of teachers to fill their classrooms. For example, Indonesia projects that it will need 10,000 new teachers a year just to maintain present enrolment rates, and Sri Lanka estimates a requirement of 3,000 teachers. In

Group B and (especially) C countries, there are an adequate number of teachers on the payroll -- but many of them are located in the wrong schools. For example, in the more comfortable urban schools, teachers may work short shifts with classes of modest size, while teachers in remote places may face classrooms with as many as 100 children.

Teacher substitution. Where school systems experience a shortage of teachers, there are a number of possible approaches. One of these approaches, which may be adopted on either a short- or a long-term basis, is to seek substitutes for the teachers. The most obvious substitute for a trained teacher is an educated individual who has adequate knowledge of the subject but no formal training in teaching. Many systems employ large numbers of such people, but it is unlikely that a system which has a major teacher shortage will have a surplus of educated people.

A second option is to alter the teaching approach so as to rely on student tutors. With appropriate guidance, advanced students can perform many useful teaching tasks. They are particularly skilful in conducting drills, supervising extracurricular in-class workbook activities, grading papers,and monitoring recesses. The mobilization of advanced students in these tutorial roles frees significant amounts of teacher time which can be devoted to more difficult instructional challenges. In some of the IMPACT schools discussed earlier, sixth graders were tutors for first graders (the latter requiring the most careful supervision as they were new to school and unfamiliar with everything), fifth graders for second graders, and fourth graders for third graders. Students enjoyed the opportunity to be tutors, and by and large benefited from the experience. They had a chance to review old material, deepening their own understanding, and gained experience in assuming leadership and responsibility. In some national settings, the main drawback was that parents complained that children who devoted time to tutoring had less time to study and hence faced the danger of low performance on exit exams.

A third option is to alter the teaching routine by developing new instructional materials that require less teacher time. In the discussion of curriculum in the next chapter, recent experiences with these instructional design approaches will be reviewed. Where schools effectively employ these techniques, student-teacher ratios can remain quite high (above 50) with no sacrifice in terms of student achievement or retention.

Teacher recruitment and deployment. In earlier eras, national authority structures were such that Governments could generally order bright young people to commit themselves to careers as teachers and could assign individual teachers to remote posts and expect compliance. In more recent years, however, new civil service regulations allow teachers greater choice with regard to their work-place

Sometimes these regulations stipulate that new teachers must take up their first job in a remote area, but after a fixed period of time -- for example, three years in Sri Lanka -- they are allowed to apply for reassignment. Many take advantage of this option and move to the cities. Thus, remote areas get a continual stream of young and inexperienced teachers who work in the rural schools to cut their teaching teeth before moving on to a more comfortable setting (see box 12).

Box 12
Supporting New Recruits to the Teaching Profession in Sri Lanka

The Colleges of Education started as a response to a number of educational policies directed towards improving the quality of education by enhancing the quality of teachers. In more than one sense, these institutions constitute an innovative strategy in Sri Lanka. They attempt to provide pre-service training -- for the first time in Sri Lanka's history of teacher education -- and to produce high-quality recruits who will teach for their first three years in remote schools located in "difficult areas".

The Colleges have a curriculum designed to familiarize and provide meaningful practice, as well as to encourage involvement with the community. In great part, the curriculum consists of extracurricular activities which are mainly designed to encourage the trainees' participation in community projects. Because they are inexperienced teachers, the programme is designed to place teacher-education faculty in advisory roles throughout the training period, which lasts two years. After this period, the trainees are placed in the classroom for a year with supervisors from the Colleges and from the schools.

The needs of the trainees during their training and their first year of teaching are adequately taken care of through the subsidization of their living and study expenses. They are skilfully introduced to the community where they will teach, and the school context provides a supportive environment during their first year of teaching -- which, as the literature argues, greatly determines whether trainees will remain in the profession.

Source: M.T. Tatto, D.H. Nielsen, W. Cummings, N.G. Kularatne, and D.L. Dharmadasa, "Comparing the effects and costs of different approaches for educating primary school teachers: the case of Sri Lanka", *BRIDGES Research Report Series No. 10* (Cambridge, Massachusetts, Harvard Institute for International Development, 1991).

The following account of teacher compensation in Indonesia (box 13) suggests some of the problems involved in structuring incentives that favour rural schools.

Box 13
The New Teacher Compensation and Promotion System in Indonesia

The new teacher salary schedule, effective April 1989, together with Replita V plans for more material support, upgrading opportunities, and curricular reform, represents a massive governmental effort to remedy the lack of incentives for entering and remaining in basic education. The major issues that need to be dealt with are the structure of incentives, opportunities for structural promotion, recruitment, the deployment of a teacher supply system, and the differential access of primary and junior secondary teachers to Diploma 2.

The new teacher compensation system provides automatic salary increases within every two-year period and opportunities for advancement in rank every four years. Promotion to a new rank is based on a credit system, which provides the same weights on a variety of items for all teachers from primary school through university. The number of credits required for promotion varies. Relatively few credits are required at the lower end of the salary scale, while a large number of credits are required at the upper end. Although credits are cumulative over time, not all credits have equal weight. Seventy per cent of the credits for promotion must be derived from educational credentials and hours of teaching, and only 30 per cent of the remaining necessary credits can be accumulated from other categories (participation in in-service training, teaching/learning activities, teaching in remote areas, community service, curriculum development, publications, etc.).

The new compensation system provides very strong incentives for acquiring additional credentials, remaining in teacher service, and teaching in more than one school. Less weight is given to preparing for class, writing and correcting tests, counseling students, participation in curriculum development, and attendance.

It is recognized that the system falls short of addressing the needs, recruitment, and retention of teachers who work in rural and/or remote areas. There are three reasons for this situation: (1) the lack of consensus on the definition of rurality; (2) the perception that teachers should not be singled out for such incentives since they represent only one class of civil servant asked to serve in remote and/or rural areas; and (3) the credit weights in the new teacher compensation plan are cumulative, and remote area compensation should be paid only when teachers are serving in such areas. Possible suggestions for policy include: providing an extra allowance for the higher cost of living in remote areas, providing rewards for teaching in these areas, with greater opportunities for subsidized training, paying the cost of moving to rural and remote schools and subsidizing home visits; and improving the salary system to obviate both delays and the high cost of travel to obtain salary payments.

Source: Improving the Efficiency of Educational Systems (IEES) Project, "A review of teacher education issues in Indonesia" (IEES Project, Florida State University, 1990).

The old command model, which conceived of teachers as recipients of government orders, has proven to be inadequate for addressing the challenge of universal access. When teachers are given an assignment to a remote area, they may resist and campaign for a more comfortable assignment. Failure to obtain a transfer may lead them to resign from the service of teaching.

A recent review of teacher policies suggests that the major weakness of the command model approach is its failure to incorporate the teacher's point of view.[17] Four different levels of teachers' concerns have to be addressed if they are going to be induced to work effectively in remote areas:

- **Socio-economic status.** The socio-economic status that teachers expect to enjoy as professionals needs to be equal to -- if not higher than -- that of their counterparts working in schools in "the centre".
- **Organizational support.** Teachers have every right to expect and even request a supportive organizational structure within and outside the school. They need to have the resources that will allow them to perform their work appropriately.
- **Professional development.** Teachers need to have the required knowledge and skills to deal with the situations present in peripheral schools in a productive and effective manner.
- **Personal concerns.** Teachers need to feel that their personal safety and health requirements will be appropriately addressed, and that they will be able to maintain acceptable standards of living.

Starting from the teacher's point of view, Maria Teresa Tatto identifies a wide range of practices that have been shown to be effective in addressing the above concerns. Some of these practices are best initiated by the more central governmental offices, while many others are more naturally provided by local governments and/or communities. To illustrate this new teacher-centred approach, tables 15 and 16 contain lists of a number of practices that may improve both teacher recruitment and teacher retention, two critical problems faced by those seeking to staff remote schools. Finally, table 17 outlines strategies which cover the training of teachers for these peripheral areas.

For a focus on other priorities such as learning acquisition, still other practices can be identified. Of particular importance is the development of teacher training courses sensitive to local conditions, which may even be held in local settings with the help of new technologies such as distance education. (See table 18 for a description of the different approaches to teacher education in Sri Lanka.)

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[17] Maria Teresa Tatto, "Policies for teachers in peripheral areas: a review of the literature" (1993).

Table 15. National and Local Initiatives that Facilitate Teacher Recruitment for Remote Areas

Teachers' concerns	National initiatives	Local initiatives
Socio-economic needs	• Provide parity in salaries with urban area teachers. • Provide an extra allowance for high costs of living in rural/remote areas. • Improve efficiency in the system of salary payments to rural/remote areas. • Provide teachers working in the periphery with job security (e.g., an initial contract for three years).	• Provide additional monetary incentives, locally administered. • Encourage the community to provide complementary salary and benefits. • Carry out effective decentralization of the payment system.
Organizational needs	• Develop minimum standards for recruiting high-ability teachers. • Develop requirements in relation to the areas where teachers work. • Develop teacher networks to offer support to teachers and schools and to make difficult/remote school conditions more attractive. • Develop supportive strategies such as school clusters or teacher cohorts.	• Develop community councils for the recruitment and selection of potential teachers. This council could also have monitoring, follow-up and orientation capacities for the newly hired teachers. • Recruit teachers similar to the population they will teach. • Recruit teaching aides from among members of the community to support teachers in the classroom.

Table 15. *(continued)*

Teachers' concerns	National initiatives	Local initiatives
Professional needs	• Provide incentives for locally trained teachers to return to their local areas • Provide incentives at the national level for principals and master teachers to train as instructional leaders • Provide resources for hiring teacher aides to support trained teachers in the language and cultural requirements of local children • Recruit qualified teacher educators for teacher training in rural areas	• Provide incentives for the on-site training of local teachers • Provide local incentives to master teachers and/or principals with training as instructional leaders/supervisors to provide on-the-job training to teachers and teacher aides • Hire local aides to support local and non-local teachers in the classroom
Personal needs	• Provide credentials • Provide opportunities for structural promotion relative to training level • Develop and implement strategies to improve the image and status of teachers in peripheral schools	• Provide safe and functional housing • Subsidize home visits for non-local teachers • Pay moving costs to rural areas • Provide job opportunities for spouses

Source: Maria Teresa Tatto, "Policies for teachers in peripheral areas: a review of the literature" (1993).

Table 16. National and Local Initiatives that Facilitate Teacher Deployment to Remote Areas

Teachers' concerns	National initiatives	Local initiatives
Socio-economic needs	• Create a national system of extra-pay/ incentives for teachers who choose to teach in rural/remote areas • Allow for staged deployment • Allow teachers to choose their posts	• Provide incentives for local, high-ability students to become teachers in their own communities • Allow for staged deployment within the region
Organizational needs	• Form a committee to match schools with teachers and vice versa, in which the teachers themselves participate actively • Use staged deployment strategies • Use advertisements to promote posts in difficult areas	• Form a local school-community committee to recruit and deploy teachers from the region • Use local staged deployment • Use local advertising
Professional needs	• Attach rural/remote service requirements to the subsidization of teacher training • Teach teachers how to teach in difficult schools • Establish systems where teacher educators follow up on their graduates	• Allow teachers to select the schools where they will teach and allow schools to select their teachers • Encourage educated locals to teach in the schools of their community
Personal needs	• During the recruitment or at the training stage, provide teachers with general orientation to help them form their own expectations about their future jobs and their roles in peripheral schools	• Provide specific orientation to teachers deployed to the region, to be given by teachers and other personnel they will work with

Source: Maria Teresa Tatto, "Policies for teachers in peripheral areas: a review of the literature" (1993).

Table 17. Strategies for Training Teachers for Peripheral Areas

Teachers' concerns	National initiatives	Local initiatives
Socio-economic level	• Associate teacher training with credentials, pay rises, promotion, mobility, and job placement	• Associate training with health and other benefits, and with the teacher's role within the school
Organizational level (school level)	• Create an instructional supervisory role within schools • Create advisory groups (formed by teachers and principals from difficult schools) to develop relevant curriculum both in schools and in teacher education institutions • Encourage the retraining or updating of teacher educators, which may require the reform of teacher education in general • Develop new and efficient programmes to educate teachers such as distance education and pre-service education	• Create teacher teams to support the development of teaching skills in difficult contexts • Create and support the work of teacher teams in the development or adaptation of curriculum relevant to the needs of remote/rural schools • Promote and support teachers' participation in school decision-making such as planning evaluation and school governance • Promote and support parents' participation in school decision-making and governance • Develop the role of mentors within the schools
Professional level (classroom level)	• Improve the skills, knowledge and disposition of prospective and experienced teachers and teacher educators, this can be done through institutional or distance education • Develop a programme of teaching induction for a year for new teachers or for teachers who will be teaching in peripheral	• Provide on-the-job training of teachers by school principals, master teachers, other teachers, or teacher educators who have had working experience in peripheral schools • Provide on-the-job training of teacher aides by the school principals, other teachers, or teacher educators

Table 17. (*continued*)

Teachers' concerns	National initiatives	Local initiatives
Professional level (classroom level) *(continued)*	schools for the first time This programme may involve tutors and teachers exchanging classroom experiences and strategies throughout the year • Include teaching practice as an essential component of teacher education programmes • Include on-the-job training in the community	• Encourage community support for training units/centres for principals, teachers and teacher aides • Create the role of teacher educators as liaisons between schools and teacher education institutions • Institute internal supervision of instruction • Set up in-school assessment of teachers' characters and attitudes to work, and assess their knowledge and skills Provide teachers with feedback
Personal level	• Subsidize teacher training for new and experienced but untrained teachers Offer in-service or pre-service subsidies • Subsidize living and study expenses for trainees • Design training programmes to upgrade teacher skills without teachers having to leave their schools, families or regions Distance education constitutes an adequate approach	• Provide trainees with one paid day per week for study • Introduce teachers to the traditions, habits, and facilities of the communities where they will teach • Assign the new teacher at least one mentor who will assist him/her in settling, planning, and implementing successful classes in the new environment

Source: Maria Teresa Tatto, "Policies for teachers in peripheral areas: a review of the literature" (1993)

Table 18. Different Approaches to Teacher Education in Sri Lanka

Programme/goal	Duration/ location	Entry conditions	Content	Supervised practice and follow-up	Approaches to training	Costs
Teachers' colleges Experienced teachers update skills and gain certification	Full-time, two years of course work, optional residency, campus-based (In-service)	Selection of successful senior teachers with either O levels or A levels	Emphasis on educational foundations, pedagogy, formation of cohorts	Included, but not a strong element	Teacher-centred, lecture format	High
Colleges of education Character and attitudes of young, qualified candidates are moulded. Diploma in education is offered	Full-time, campus-based, residential, two years of course work, one-year internship (Pre-service)	Young candidates with A levels	Innovative curriculum based on current research, co-curricular activities, subject-matter emphasis, formation of cohorts	Strong emphasis	Pupil-centred, experimental learning	High
Distance education Teaching skills within the existing teaching force are updated. Diploma is offered	Field-based, three to five years of course work	Experienced teachers with either O levels or A levels	Emphasis on pedagogy and subject-matter knowledge	Important component	Carefully designed self-instructional materials, "teaching while learning", group activities, tutorial visits, peer relationships	Low

Source: Maria Teresa Tatto, "Policies for teachers in peripheral areas: a review of the literature" (1993).

IV. Parents and Community

The limits of Government For many decades it was assumed that Governments could effectively "deliver" education to all children if only the bureaucracies could eliminate corruption and become more efficient. It has become increasingly evident, however, that Governments have their own limits; though constituted to serve all, they in fact operate to serve some better than others. Governments often prove highly inept at extending their services to the more remote areas. It is not that they do not care for remote areas, it is rather that they care more about other areas; further, remote areas are often slow to respond to the Government's initiatives, so progress on access is curtailed. Some of the shortcomings of government action may include the following:

- A failure to involve local elites in school affairs.
- The design of a curriculum that favours urban children but is nonsensical and even offensive to those in remote areas.
- A failure to deliver instructional materials in a timely manner.
- Insistence on an overly rigid schedule for the schools.

A greater reliance on local governments is seen as one approach for remedying these weaknesses -- i.e., through the delegation of responsibilities or by facilitating other modes of decentralization. The previous section indicated a number of useful initiatives that local governments could undertake to respond to the concerns of teachers. Sometimes, however, local governments are mere extensions of the central Government; their officials look to the centre for direction rather than seeking guidance from the people in their immediate environs. Where local governments lack autonomy or meaningful relationships with their constituent communities, they are unlikely to do much to correct the failures of the centre.

Mobilizing communities Another approach draws on the initiative and energy inherent in local communities. Even communities that are disaffected *vis-a-vis* the established Government or its policies may not have an aversion to improving the health or literacy of their children.

Interest thus shifts towards ways to mobilize this communal energy through, for example, new relationships among Governments, schools, and communities. These new relations can be started by any corner of the triangle, though it is likely that the community corner will initially be the most reluctant.

In developing a community-based strategy, it is important to recognize the enormous variety of communities that are likely to exist in a contemporary society. One example of this diversity is found in Sri Lanka, where there are four major ethnic-religious groups -- and within each of these are numerous other distinctions such as those existing among plantation and urban Tamils, Catholics, and Protestants. Rural communities tend to be relatively homogeneous in their commitment to one or the other of these cultures.

While Sri Lanka is relatively complex, comparative studies indicate that the country is certainly not extreme in this regard, at least in terms of the ethnic and linguistic complexity referred to in chapter two. One should remember that there is a clear and strong correlation between these measures of complexity and the level of access achieved by national educational systems. The more rural and ethnically complex a society is, the lower its level of access.

Bridging the values gap. Complexity involves differences. In a modern society, a Government may promote one world view, while particular communities may adhere to another. Under such conditions, the community is likely to be ambivalent towards or even opposed to government initiatives. A highly simplified way of looking at communities is therefore to distinguish between those that are receptive to the Government's world view (''high-demand communities'') and those that are cool or resistant to government educational initiatives (''low-demand communities''). Building a partnership is much more difficult with low-demand than with high-demand communities; consequently, expanding access means confronting the challenges presented by these low-demand communities.

Leaving aside the question of how positive change can be implemented, it is useful at this point to review some of the areas that need change. Because the most fundamental Government-community tension may derive from perceived differences in values, outlining problem areas provides a useful beginning for considering possible changes. Table 19 below indicates several measures that might be carried out to bridge this values gap.

Table 19. Adapting the Delivery of Education to Local Values

Reasons for low participation	Measures to address the problem
• A method of delivery which conflicts with local values related to gender roles • A general mismatch between the values of schooling and local values • A lack of appropriate role models as teachers • An insufficient number of teachers for peripheral schools	• Correct specific problems (build walls, latrines, etc.) • Establish single-sex schools, link schools with important local institutions such as religious bodies, upgrade the quality of programmes • Recruit and deploy more female and/or local teachers, recruit and train locally, modify entry requirements, subsidize teacher training, provide room and board, set up flexible employment policies • Recruit and train educated community members as teachers

Source: William K. Cummings, G.B. Gunawardena, and James H. Williams, "The implementation of management reforms: the case of Sri Lanka," *BRIDGES Research Report Series No. 11* (Cambridge, Massachusetts, Harvard Institute for International Development, February 1992).

The examples in the table above are selected because they can be accomplished in a relatively short period of time. More challenging steps include the diversification of the curriculum to incorporate local languages and religion, and a greater stress on locally relevant skills. Whichever measures are considered, it is obvious that they will be best accomplished when local leaders are included in the decision-making process.

Adjusting to the child's familial obligations. Assuming the values gap can be bridged, there remains the problem of developing an educational experience that is consistent with the role children play in the local communities. In part, parents give birth to children because they need them for various tasks related to the household and/or the family business. Schools that compete with these familial demands will have more difficulty in attracting students than those which are adaptive. Table 20 suggests a number of measures that schools can consider.

Table 20. Adapting the Delivery of Education to Children's Constraints

Reasons for low participation	Measures to address the problem
• School attendance prevents children from caring for siblings	• Permit siblings to attend class • Set up day-care centres near schools or at work-places
• School attendance prevents children from attending to family chores such as the preparation of meals, planting and harvesting, etc	• Schedule school classes in the morning or afternoon only • Schedule the school year around growing seasons
• The curriculum requires that students enter school at a specific age, attend school every day, continue attending without interruption, and complete a whole year -- or they will fail	• Develop non-graded, unit-based curricula. Allow children to enter school and progress at their own pace
• Children are over the entry age	• Develop second-chance programmes. Provide children with alternatives for joining formal schools at an older age
• Failure is easy	• Institute a system of automatic promotion. Eliminate exams in early grades

Source: William K. Cummings, G.B. Gunawardena, and James H. Williams, "The implementation of management reforms: the case of Sri Lanka," *BRIDGES Research Report Series No. 11* (Cambridge, Massachusetts, Harvard Institute for International Development, February 1992).

Watching costs Yet another constraint to access is the cost of schooling. These costs can be either out of pocket or indirect (e.g., children foregoing other activities). As Governments encourage communities to assume greater responsibility for their own schools, there is a growing tendency for them to make these communities recover some of the costs of schooling from parents. It is often assumed that this strategy places a greater financial burden on parents, and hence reduces their willingness to send their children to school. However, the consequences of a community playing a role in school finances may be more complex. First, it turns out that parents are reluctant to pay for schools when they have no voice, but are less tight-fisted when the schools are perceived as their own; parents who lack cash are willing to support schools with labour or materials that they can procure from the environment or their work-places. Second, schools run by local communities tend to be less expensive to operate than those managed by Governments, because local communities find ways to cut costs in areas such as school construction and maintenance, personnel budgets (by relying on volunteers), and incidental expenses (e.g., uniforms and instructional materials). Finally, some community-run schools find ways to draw on pupil labour to generate income; examples include fish, poultry, and cash-crop farms established on school grounds.

Community involvement may improve education As the community begins to play a role in the school, a whole range of resources may be uncovered that were not formerly available, such as land for branch schools or for extracurricular school activities, volunteer teachers, or in-kind assistance. Community involvement may have direct benefits for the instructional programme as well. Further, as schools and communities come closer together, teachers are often accorded more respect. For example, parents come to appreciate the financial hardships teachers face, and often begin to provide them with presents of rice and vegetables.

As communities become involved in schools, it is apparent that schools tend to develop a fuller programme more consistent with community values. Research indicates that community involvement tends to result in improved educational results, including both improved access and higher levels of pupil mastery of subject matter. The box below summarizes evidence from the recent experience of community involvement in Sri Lanka.

How to get the community involved. Where schools have long been established and run by government bureaucracies, communities assume that someone else is in charge. Schools often have to take the lead in involving the community, initiating activities that demonstrate the school's interest in the community. For example, the schools might take up projects to clean out the ditches alongside key roads, using both pupil and teacher labour.

Box 14
School-Community Relations in Sri Lanka

As part of a series of reforms beginning in the late 1970s, the Sri Lankan Government set out to improve school-community relations. Legislation authorizing the establishment of local school development societies (SDS) was enacted to provide a formal structure for community input into the schools. While previously only parents' and teachers' opinions had been solicited, now the entire community was asked to assist in helping develop local schools. At the same time, the legislation encouraged schools to play a strong role within the community.

A survey of schools carried out several years after the implementation of the reform found that 69 per cent of all communities provided schools with some form of support, and that 58 per cent of the schools provided support to their communities. Schools helped build roads (29 per cent) and places of worship (29 per cent), assisted with religious, cultural and recreational events (23 per cent), and provided personnel and facilities to teach school drop-outs (10 per cent). Communities helped organize school functions (56 per cent), provided monetary support (56 per cent), and helped build and maintain school facilities (42 per cent). As one community member stated:

> *Here the people are poor, and the funds are poor too. But people show their good will in other ways, by labor, by their high respect for the principal and teachers and their feeling of intimacy towards the school.*

Source: William K. Cummings, G.B. Gunawardena, and James H. Williams, "The implementation of management reforms: the case of Sri Lanka," *BRIDGES Research Report Series No. 11* (Cambridge, Massachusetts, Harvard Institute for International Development, February 1992).

In many countries, schools have small musical groups; the principal might suggest to community leaders that they make use of the band for one of the community's festive holidays. Or schools might volunteer the services of children to clean the local mosque or church. Table 21 summarizes some strategies that have been found to be effective.

As the school reaches out to the community and shows that it cares, the community is likely to reciprocate by showing greater interest in the school, with a partnership gradually forming. Although the nature of this partnership will inevitably change over time, table 22 lists several ways in which the partnership may prove useful for the school.

Involving the community in the school is a potentially rich area for innovation that has benefits far beyond access. In the chapters that follow some of the other possibilities will be explored.

Table 21. What Schools Can Do for Communities

Community problems	What schools can do
• Many school drop-outs and illiterates	• Offer instruction • Provide alternative ways for drop-outs to obtain education certificates • Provide drop-outs with ways to re-enter the formal school system
• Few learning resources	• Share educational resources
• Community problems addressable with information	• Provide information
• Low level of community development	• Provide ideas, information, leadership, and labour to address specific community problems

Source: William K. Cummings, G.B. Gunawardena, and James H. Williams, "The implementation of management reforms: the case of Sri Lanka", *BRIDGES Research Report Series No. 11* (Cambridge, Massachusetts, Harvard Institute for International Development, February 1992).

Table 22. How Community Involvement Can Improve Education

Provide support for instructional programmes
• Cultivate an environment supportive of school programmes • Improve enrolment, retention, and attendance • Monitor studies at home, ensure that all students have adequate study space • Identify problems and help students with them, help students with family emergencies • Boost morale of school staff • Provide assistant or regular teachers • Provide instruction in specific areas of expertise (where teachers lack expertise) • Pass on community knowledge • Provide apprenticeship and work opportunities
Supplement school resources
• Donate land for school, donate labour/materials to build or help build the school buildings • Repair/maintain facilities • Donate equipment and learning aids (e.g., books, teaching materials) • Raise money for the school

Source: William K. Cummings, G.B. Gunawardena, and James H. Williams, "The implementation of management reforms: the case of Sri Lanka", *BRIDGES Research Report Series No. 11* (Cambridge, Massachusetts, Harvard Institute for International Development, February 1992).

V. Management and Finance

Bringing about many of the changes discussed above has important implications for the ways schools are financed and managed. The financial and management practices prevalent in most nations are not really conducive to realizing full access. Moreover, their limitations also influence the realization of other priorities.

As this is the first opportunity to discuss these practices, some concepts with implications for both access and other priorities will be introduced. There will also be a return to this topic in the coming chapters, to add other findings and recommendations that have more obvious applicability to these other priorities.

In most national contexts, management and financial practices build on long-standing traditions. A basic concern is to provide support for local services at a more or less equal level across the society. Towards this end, standard formulas have been devised which make only minimal adjustments to take into account the variations in local circumstances. Second, these practices reflect a governmental will to impose a world view on local actors, as well as a belief that local areas have a scarcity of talent. The practices thus tend to be highly prescriptive, leaving relatively little latitude for local discretion. From the point of view of access, the fundamental weaknesses of current practices are twofold:

- They are not sufficiently sensitive to local needs.
- They stifle initiative at both the school and the community level.

Creating partnerships. A fundamental shift is required, as is implied in the review of the various initiatives discussed above: the top-down notion of educational systems should be replaced with a new approach where schools and communities are equal partners with Governments, and where each one has a role to play. The challenges involved in performing these roles will vary according to national and local contexts and may require an extensive review of national laws and regulations. However, these changes are worth it if they promise to unleash the new energy required to realize Education for All.

Dividing responsibilities. The basic recommendation put forth here is that the responsibilities of the different partners in education should be more clearly delineated. The Government is urged to place a limit on its responsibilities -- namely, to focus on the promotion of national unity and the equal provision of education -- and should look to its partners in education to assume other responsibilities. Parents should be expected to provide as much support as they can (but it should be clearly recognized that parents vary in their capabilities, and that other partners should be asked to compensate for parents with limited financial and cultural capital). Schools should be looked to for strategies to promote excellence in accordance with their local circumstances. They should

also be encouraged to develop strategies to draw resources from their local surroundings, by means of school-based industries, revenue-generating events such as music concerts or sports events, and tuition charges

The centre might limit its role primarily to the preparation of curriculum and textbooks In the partnership described here, the central Government, as a promoter of unity, may conclude that it need not mobilize every vehicle possible to ensure unity, but that it should rather focus on those levels where it has a comparative advantage The record suggests that the Government's most effective source of influence is the curriculum, and perhaps textbooks There is little evidence indicating that the Government's vast efforts to train personnel and control them through a centralized hierarchy has had the intended effect There is a widespread and growing sense among educational personnel that government procedures hamper rather than promote the educational process Under these circumstances, it would be wise for the Government to consider ways to deregulate many areas of administrative procedure, top priority should be given to personnel procedures, with schools being given greater autonomy over their own affairs, and the Government exercising control through mechanisms of accountability

Flexibility It is critically important to foster flexibility, so that education can accommodate the great diversity of circumstances surrounding it Although it may make sense for the centre to develop a core curriculum, it is also important to build specific areas into the framework where local schools are encouraged to develop applications and elaborations suited to their own circumstances These may take the form of local examples, such as a focus on local economy and culture In some national contexts, the adaptation may even involve a translation of the centre's core curriculum into local languages Table 23 summarizes these principles

Government formulas for school support should be based on existing needs The Government, as a promoter of equity, should reconsider the way it supports schools Current formulas are highly uniform, with the delivery of services to schools generally based on the number of students enrolled Yet it is less the number of students than local circumstances that determine the difficulty of the educational task One critical circumstance is geography, schools located in urban settings have access to a large pool of human resources while those in peripheral areas do not, and it takes more to get a qualified person to work in the latter A policy promoting equality would recognize that fact, and would provide relatively more support to a peripheral school than to an urban school Box 15 describes a teacher training programme in Tanzania which stresses community involvement and encourages teachers to offer their skills in their own regions

Table 23. Developing Curriculum to Meet the Needs of the Periphery

Curricula most successful in the periphery

- Visibly (and actually) practical
- Rigorous enough to permit children to participate in regular schools
- Available in the language(s) the child will need
- Adaptable to
  - (a) Multi-grade or single-grade classrooms,
  - (b) Self-, peer-, or teacher-led instruction,
  - (c) Varying teacher capacities,
  - (d) The individual child's schedule and learning pace
- Self-contained
- Structured according to children's time
- Accompanied by practice-oriented teacher training and instruction oriented supervision

Source: William K. Cummings, G.B. Gunawardena, and James H. Williams, "The implementation of management reforms: the case of Sri Lanka", *BRIDGES Research Report Series No. 11* (Cambridge, Massachusetts, Harvard Institute for International Development, February 1992).

Box 15
Teacher Training for Community Schools in Tanzania

In 1970, Tanzania redesigned the structure and curriculum of teacher education and training as a way to promote the community school concept and to implement universal primary education by 1977. A "crash programme" for teacher training started in 1976, with the aim of training 40,000 extra teachers. The programme, through a village education committee under the ward education coordinator, selected and recruited primary school leavers and provided them with three years of training, with 12 to 15 weeks of teaching practice (three days per week). The trainees were tutored and supported by programme and school personnel during their training. The programme included the following: compulsory correspondence courses in principles of education, mathematics, Kiswahili, and syllabus analysis; optional correspondence courses in English, geography, history, and political education; radio broadcasts for several of the courses mentioned above; and a six-week residential training which included a revision of education, mathematics, Kiswahili, and syllabus analysis as well, and two weeks of teaching practice before sitting for the national examination in the four subjects.

A teaching certificate was given to those teachers who passed the national examination, which covered the four subjects, teaching practice, character assessment and attitude to work. According to Dove (1982), the programme had trained 35,058 teachers as of 1981, and was believed to have achieved its objectives.

An important feature of this programme is the selection of teachers, which is based not only academic qualifications but also on character assessment. In Dove's words:

> *These teachers have to prove themselves worthy members of the community, able and willing to participate in self-reliance activities. Once trained, teachers normally teach in their own region. The policy is to encourage teachers to work in their own communities whenever possible. Another innovative feature is the teamwork approach to training. Student teachers teach in the community and on-the-job, not in isolation from the community as in conventional college-based programs. The tutors from the training colleges, inspectors, head teachers, and practicing classroom teachers cooperate to supervise their work. The college teachers and inspectors have had experience of primary teaching themselves, a factor given great importance by the authorities. The itinerant teacher educators (ward education coordinators) are key figures traveling around to guide and advise teachers in training and as liaisons with the schools.*

Source: L. Dove, "Lifelong teacher education and the community school", *UIE Monographs*, No. 10 (Hamburg, UNESCO Institute for Education, 1982)

Schools need to build complex relationships with their communities In their pursuit of excellence and relevance, schools should be encouraged to develop a more complex picture of their community. On the one hand, there are parents who supply children, on the other, there are firms and government services which employ the graduates of the school system. Both parties should be invited to join the schooling process as supporters and decision makers. It may be possible for schools to diversify their curricula by sending students for internships in the work-places of future employers or by otherwise strengthening their relationships with the labour market.

School plans as a requisite for funding Governments might consider a strategy of supporting schools to the extent that they demonstrate a willingness to support themselves, or alternately, if the school can provide a description of a programme worth supporting. In other words, rather than providing automatic support, the Government should require a school to give some indication of its plans for utilizing that support. This approach would place greater pressure on schools to determine their own goals, keeping in mind the needs of their local community. Principals would be required to play a major role in developing the details of the school programme.

Such changes might require revisions of established laws and regulations. In Sri Lanka, for example, the School Development Society Act was passed many

years ago to encourage a partnership among parents, schools, and the Government. Among its provisions was a stipulation that each local school development society could maintain a treasury of up to 200 rupiah -- once a significant sum but now a pittance. While having the intent of fostering more community involvement, the Act has, over time, stifled many opportunities.

Block grants for school funding. The preferred model here is that of a school lacking guaranteed resources from the Government (except for a minimum block grant, the size of which might vary according to the circumstances). The school would be expected to develop a plan of its own for the management of this grant, and would be encouraged to seek additional resources, including both government grants and community support, from various sources. Schools would be allowed to admit new students under a controlled programme of growth, even at the expense of enrolments at nearby schools, as long as the student chose the school voluntarily. Controlled competition would be used to stimulate excellence and responsiveness to local demand.

Encourage local networking. It may make sense, particularly in remote areas, to establish several small schools rather than one large central school. These small schools need not necessarily be viewed as separate entities; on the contrary, they might be combined as a cluster around a central coordinating office that stocked common resource materials. The central office could become the budgetary and management unit for this cluster. Even where schools of normal size exist, it is of considerable value to foster local networks. The main advantages tend to be in the area of professional development, however; clusters would also be useful for addressing access issues. For example, if a teacher in one school were sick or on maternity leave, a cluster could provide the framework for identifying teachers who could fill in on a part- or full-time basis through rotation from a member school.

Broaden the principal's role. In many educational systems, the principal's role is carefully prescribed. The principal is allowed to receive children from a specific catchment area, he is provided with a fixed curriculum, is given a certain number of teachers and materials to accomplish the job, and has little discretion over funds or other resources. Although principals are generally implementers of externally derived plans, most are capable of much more. They have considerable experience with teaching and clear ideas on what it takes to help children learn. They know people in the community who are willing and able to teach, and who do not need standard compensation. They may even have ideas about how to improve the school grounds. However, rules and regulations may restrict the principal from acting on this experience.

It is possible to give principals a bigger job, and to the extent that this is done, most schools will accomplish more. The principal can be allowed greater discretion in virtually every area of activity (see box 16).

Box 16
Developing Strong Leaders to Support Dynamic Schools

In a study carried out in Indonesia, Cummings and his collaborators have recently found that dynamic schools in this country are characterized by principals who have taken charge of developing approaches that reach beyond the prescriptions of the government programmes and the exclusive dependence on government-supplied resources.

Congruent with the idea that the greatest productivity and adaptability is achieved when those closest to the problems are given wide levels of discretion to respond to local situations, Cummings and his collaborators found that the more dynamic and efficient schools could be portrayed in terms of the politics-market metaphor, where more dynamic schools were characterized by more independence from government regulations, by principals who were comprehensive managers and showed entrepreneurship capabilities, by the relatively high proportion of resources financed from client revenues, and by moderate costs to clients.

Included here are excerpts of the description of a school exemplifying this situation, as shown by Cummings and his collaborators.

The 70-year-old "Pondok Parabek-Padang Panjang" school is situated in a rural area and is a private institution in terms of fiscal matters, receiving only modest assistance from the government. ... [F]ormal responsibility for the school rests with a group of individuals, one of whom is the school principal. Associated with this group is an advisory board composed of a notable group of political and religious leaders, many of whom reside in West Sumatra. This board meets once a year to provide advice on long-term planning. Daily operational affairs, including financial management, rest primarily in the hands of the principal and his assistant; these two chief officers apparently share most of their decisions with the other teaching staff. ... [T]he institution currently has 1,200 students enrolled, with more at the lower than the higher levels. ... [M]onthly fees at the lower levels (elementary grades) are Rps. 6,000 and at the higher levels are Rps. 7,000. ... [T]he teaching staff consists of five faculty who are provided by the Ministry of Religious Affairs and 55 who are on an honor basis (at Rps. 3,000 a month per hourly load) and whose pay has to be covered from student fees. Most of the staff are former students. ... [W]hile the school reports little difficulty in retaining staff, it nevertheless began a pension plan four years ago ... [to be given to teachers who have been associated with the school for ten years] ... The school begins [by] putting Rps 10,000 a month into the teacher's retirement fund; after fifteen years, the contribution is raised to Rps. 15,000, and similar increments occur for each additional five years. ... [S]imilar care is evident in other areas of the school's management ... [such as efforts to reach out to the community]. ... The most dynamic Indonesian schools are those where principals have taken charge, developing approaches that reach beyond the prescriptions of the government programs and the exclusive dependence on governmental supplied resources.

Source: W.K. Cummings, M.R. Suparman, and I.M. Thoyib, "The Indonesian school principal: broadening responsibility", a paper prepared for the IEES-EPP Workshop held in Jodjakarta, Indonesia, in June and July 1992.

Management training is required To stimulate the assertiveness of schools, it is advisable to develop new programmes in management training that target both school principals and local educational officials. These new programmes would, on the one hand, encourage principals to take a more assertive role in school management, and on the other, encourage local officials to allow schools more discretion.

Case-studies of schools that show initiatives are needed In support of these changes, it is recommended that case-studies be conducted in schools that show impressive levels of initiative in self-management and in reaching out to their communities. What inspires these schools? What have they accomplished? What is imitable? Similarly, pilot projects in self-management might be launched both to foster new initiatives and to find out what in the current system thwarts initiative.

VI. Conclusion

While Governments and international agencies have repeatedly issued calls to eradicate illiteracy and spread enlightenment, and have in most instances set up elaborate public education programmes, there are today far more people who cannot read than there were in 1789 or 1945. Clearly, the established educational programmes miss large proportions of the world's citizenry.

In thinking about what has gone wrong, the present authors have come to the conclusion that the established programmes may be incapable of making further progress; they may have reached an upper limit. Further, the EFA initiative, channelled through international donors and central Governments, offers little that is new. What are the limits of modern education, and what needs to be changed?

- Established programmes tend to be tailored to standard situations found in large cities and in places where the population is concentrated. Specifically, the established programmes are based on the following:
  - (a) Schools built around separate classes for separate grades.
  - (b) A centrally devised curriculum, typically authorizing instruction in the metropolitan language.
  - (c) Centrally produced textbooks.
  - (d) Teachers trained for standard settings, and rewarded by a salary schedule and a promotion ladder issuing from a central bureaucratic office.
  - (e) Principals appointed from the centre who have the authority to operate independently of community will.

(f) A system of centrally funded instructional and infrastructure support that focuses on school as a unit rather than on communities, and that treats all schools as equal, independent of the school's resource base or the challenges the school confronts.

- Programmatic modifications are often introduced to accommodate settings that differ from the standard norm. However, these modifications on the "one best system" are not enough.
- If the concern is to reach the periphery, it will be necessary to encourage unique approaches for a variety of unique local settings rather than seeking to modify central formulas. These unique approaches may include multi-grade classrooms, locally tailored materials, voluntary instructional staff (including students as tutors), and instruction in the local language.
- While the focus of central educational systems is on the schools established by the centre, it should actually be placed on communities and their educational needs. Communities have legitimate leaders who can become partners in education, helping to identify priorities, mobilize local resources, propose approaches that fit local circumstances, and provide continuity.
- Central support for schools tends to provide equal support for each educational administrative unit, based on the number of pupils that the unit serves. However:

  (a) These formulas provide equal funding for unequal conditions. Some areas are more challenging because of difficult terrain, dispersed populations, and/or the lack of pupil preparedness; these are the peripheral areas. A truly equal funding formula would provide support in direct proportion to the challenge.

  (b) These formulas do not take into account the differential ability of the pupil enrolment to support education. An equalizing formula favourable to the periphery would provide central support in inverse proportion to the local area's ability to support education.

- When channelled through local administrative units, central funding can often lead to waste and excessive regulation. New approaches to funding need to be considered that are more equitable and that reward performance.

(a) Central support to administrative units enables them to allocate funds and other resources among schools according to criteria decided by the administrators, often with little concern for the differential needs of schools. A more equitable approach would be to channel funds and resources directly to the schools.

(b) Funding directed to schools might be provided in response to budget requests by schools, and allocated in such a manner as to provide incentives for those schools that are most prepared to help themselves. Alternatively, funding might be provided in proportion to school improvement in academic performance or other areas.

Chapter Six

IMPROVING LEARNING ACQUISITION

In addition to stressing improved access and equity, the World Declaration on Education for All urges educators to focus on learning acquisition. Article 4 establishes that schools should not concentrate "exclusively on enrolment, continued participation, and completion of certification requirements", rather, they should emphasize learning. The Declaration recognizes that many schools stress irrelevant material and teach it poorly, causing children to disengage from the learning process.

> *In a windowless building, a teacher chants a lesson to 40 youngsters who sit on the floor without pencils or pads or textbooks. The young people chant back in unison, in a language they do not understand. No questions are asked or answered, until the end of the day when each child is asked in succession to repeat the day's lesson out loud, as a condition for going home. Within three months the original group of 40 is down to a manageable size of 12.*[48]

Under these circumstances, children may attend several years of school but end up with little of value. Others, disinterested or discouraged by what they find in school, may simply leave it. The wide prevalence of sterile educational settings leads to the two questions which will be the focus of this chapter: What should be learned? What policies enhance learning?

I. Introduction

The Supply of Education: A One Best System?

The temptation to offer easy answers to questions of this kind has always tantalized educators. Some years ago David Tyack, in an interpretative history of American urban education, traced the powerful social forces that led to the search for the "one best system" for American public education in the nineteenth century.

> *Convinced that there was one best system of education for urban populations, leading educators sought to discover it and implement it. They were impressed with the order and efficiency of the new technology and forms of organization they saw about them. The division of labor in the factory, the punctuality of the railroad, the chain of command and coordination in modern businesses -- these aroused a sense of wonder and excitement in men and women seeking to*

[48] UNICEF, Bangladesh Rural Advancement Committee, "BRAC non-formal education appraisal: feasibility of first expansion phase" (Dhaka, June 1993).

> *systematize the schools Efficiency, rationality, continuity, precision, impartiality became watchwords of the consolidators In short, they tried to create a more bureaucratic system* [49]

Much the same fervor for a "one best system" is evident today Thanks to a growing body of research, a number of reports are now available which outline what works in education, clear learning goals, pupil motivation, an orderly but active classroom, and time on task are some of the themes commonly featured in these reports [50-56] However, as was suggested in chapter four, it may be that the recent research has not defined the issues broadly enough, and has thus generated somewhat limiting conclusions Therefore, to begin this discussion, two contrasting "best systems" for enhancing learning acquisition will be presented

A centralized systems approach In the early 1970s, Korea began a national educational reform under the direction of the Korean Educational Development Institute (KEDI) By introducing new concepts of systems analysis and planning, the reform sought to accomplish the following

- Develop new curricula that both reflected Korean national ideals and needs and were balanced in terms of cognitive, affective, and psychomotor learning
- Increase student achievement
- Improve cognitive processes of a higher order, such as problem-solving, critical analysis, and creative thinking
- Narrow the gap between rural and urban areas in terms of student achievement, educational opportunity, and the quality of instruction

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[49] David Tyack, *The One Best System A History of American Urban Education* (Cambridge, Massachusetts, Harvard University Press, 1974), pp 28-29

[50] David W Chapman and C A Carrier (eds), *Improving Educational Quality A Global Perspective*, (Greenwich, Connecticut, Westview Press, 1990)

[51] Marlaine E Lockheed, Adriaan M Verspoor, and associates, *Improving Primary Education in Developing Countries* (Washington, D C , World Bank, 1991)

[52] Noel F McGinn and Allison M Borden, *Better Education for All ABRIDGES Manual for Managers and Policy Makers* (monograph), (Cambridge, Massachusetts, Harvard Institute for International Development, September 1992)

[53] George Psacharopoulos and Maureen Woodhall, *Education for Development An Analysis of Investment Choices* (New York, Oxford University Press, 1985)

[54] United States Agency for International Development (USAID), Office of Education, *Lessons Learned in Basic Education in the Developing World* (Washington, D C , USAID, 1990)

[55] United States Department of Education, *What Works Schools That Work Educating Disadvantaged Children* (Washington, D C , US Department of Education, 1987)

[56] United States Department of Education, *What Works Research about Teaching and Learning*, second edition (Washington, D C , US Department of Education, 1987)

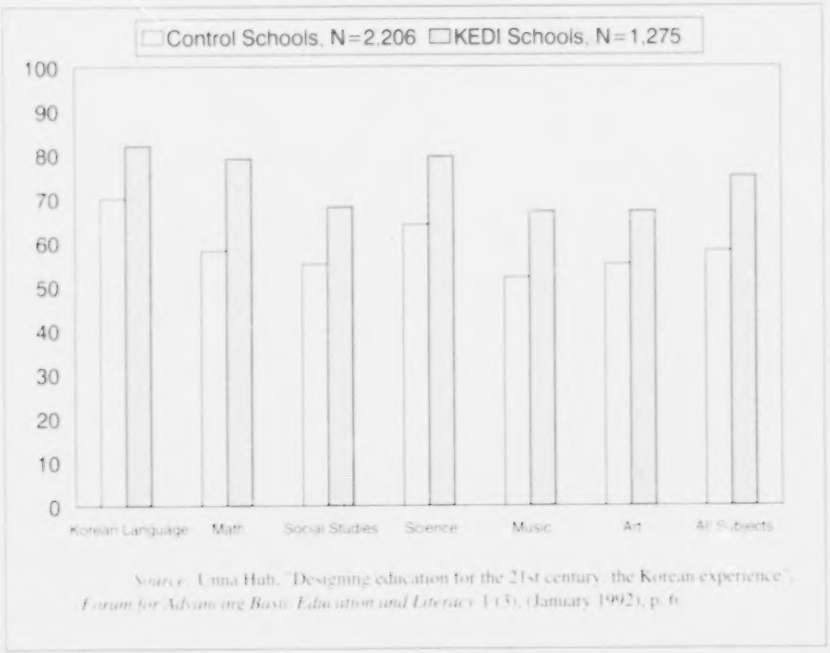
- Make public education more accountable and more credible to the general public in order to foster nationwide support for education.

As a first step, a series of "town meetings" were held around the nation to gain a sense of what was expected from the reform. A new centralized curriculum was then designed based on the latest principles of systematic instructional delivery. The curriculum specified clear goals for each grade and subject, and broke the subjects down into small units, each composed of a diagnostic stage, a teaching/learning stage, and an extended learning stage.

Teaching guides, special instructional materials (including texts, student workbooks and teaching aids), and coordinated sets of formative/summative evaluation instruments were developed. To support these reforms, school management procedures were altered to strengthen instructional support and facilitate greater coordination among teachers. Additionally, special in-service training programmes -- in some cases utilizing television and radio -- were launched to familiarize both teachers and principals with their new roles.

As illustrated in figure X, a careful evaluation of this reform indicated a remarkable improvement in the various academic subjects. While the evaluation

Figure X. Achievement Levels of Children in KEDI Schools and Traditional Schools



Source: Uma Huh, "Designing education for the 21st century: the Korean experience", *Forum for Advancing Basic Education and Literacy* 1 (3), (January 1992), p. 6.

did not focus on the non-cognitive outcomes, the reformed schools also developed a reputation for strengthening student confidence and work habits. It can be argued that Korea's reform was so successful because the systems approach applied was not too distant from the underlying centralized and highly disciplined approach to education that is characteristic of all East Asian nations.

The reform led by the KEDI programme was carried out on a national scale, but in other countries similar reforms have focused on specific regions or groups. The group of IMPACT reforms mentioned in chapter five primarily focused on rural schools, notably those located in sparsely populated areas. IMPACT reforms rely on many of the same principles as those set by the Korean example, and generally result in impressive improvements in pupil retention and academic performance. This goal has often been achieved even when teachers have had low educational levels and have been required to teach large classes (typically 40 students or more). What is distinctive about this family of reforms is the necessity for the systematic development of an integrated approach to instruction. This approach has to be implemented in schools which have a considerable array of instructional materials and evaluation instruments, and a centralized development office must be established for this purpose.

A decentralized school-based management approach. Many educators in the more developed countries have recently come to place more faith in school-based reforms than in the centralized approach. They argue that those who manage and work in schools have sufficient wisdom to develop a curriculum suited to the needs of the ordinary child. Thus, they propose that most decisions be left to individual schools, with the centralized agencies playing only a minimal role (except for possibly providing some financial support). To stimulate schools to do a good job, some advocates of school-based management urge that parents be given considerable freedom to send their children to whatever school they wish, and that they be granted vouchers to pay the tuition at the school of their choice. To the extent that parents are able to exercise their choice, schools will become more sensitive to the true needs of both the parents and their children -- and presumably, education will become more effective (see box 17).

Many studies purport to show the advantages of school-based management. James Coleman and Thomas Hoffer,[57] in a highly publicized comparison of public and private high schools in the United States, report that the private schools achieve much better academic results at a lower cost per unit. They attribute the difference to the superior curriculum, teaching and discipline in the private schools, and especially to the closer links these schools have with the local community. This study has been widely replicated, and in recent years a number

[57] James S. Coleman and Thomas Hoffer, *Public and Private High Schools* (New York, Basic Books, Inc., 1987).

Box 17

School-Based Management Comes to Dade County, USA

The school-based management (SBM) programme and its accompanying philosophy of shared decision-making (SDM) have been implemented in the Dade County public schools to give more power to principals and teachers so that they can do a more effective job of educating the children. Not long after the programme began, more than half the schools in the county were operating according to SBM/SDM principles, and it was expected that by August 1991 SBM/SDM would be operative at every school in the county.

SBM allows managers in local schools to make decisions on school policies, while shared decision-making involves the teachers and potentially other school staff members, as well as parents and students. Although principals maintain final governing authority under this system, teachers and principals together might decide upon staffing, budget, curriculum, scheduling, student activities, in-service training and other matters. By placing authority at the school level, those directly involved can excercise a certain amount of creativity and freedom in addressing the educational needs of the students.

This experiment represents a dramatic reversal of the "principal-proof" evaluation methods and "teacher-proof" curricula of the past. Greater power for principals and teachers has resulted in greater enthusiasm. A number innovations have occurred in some SBM/SDM schools. Principals are allowing teachers to share power which was previously closely held by the administration, and teachers are showing a new, reawakened sense of professional responsibility, and are even taking on the task of evaluating and counseling each other. Schools function more as teams, with a high level of communication between the team members and significant penalties for team failure. Elements of risk and entrepreneurship are being introduced into a profession known in the past for its concerns about employment security and income.

There are many potential pitfalls in the movement towards SBM/SDM. Decentralization alone can lead to even wider disparities in school performance than those which already exist. Students from low-income families suffer the most. Centralization and decentralization must be blended in a new way so as to allow for creativity at the school level while keeping a coherent focus for the district as a whole.

Source: World Conference on Education for All (WCEFA), held in Jomtien, Thailand, from 5 to 9 March 1990: *World Declaration on Education for All* (New York, Inter-Agency Commission: UNDP/UNESCO/UNICEF/World Bank, 1990).

of limitations have become apparent with respect to its findings. School-based management may be preferable if schools have talented principals, markets for key inputs (e.g., textbooks and teachers), communities with strong and somewhat divergent value commitments, and a keen interest in education. Unless these conditions (which are more likely to prevail in urban areas) are met, this highly decentralized approach may not be advantageous. Nevertheless, the school-based approach seems to be the preferred model of the World Bank, an agency that is now advocating market solutions for a variety of social services.[58]

The Demand for Education

The models above are directed towards the provision of an education that Governments or other sponsors may supply. However, as was repeatedly observed in chapter five, the success of these or other models largely depends on the receptiveness of the local community.

The concepts of high-demand and low-demand communities have already been defined. In the first case, parents have a positive attitude towards the "modern" curriculum, as they perceive links between mastery of this curriculum and opportunities for modern jobs. In low-demand communities, however, parents are more sceptical. Particularly in these latter settings, a centralized approach that focuses solely on an academic curriculum may fail to connect; schools must focus on topics that are important to the kids.

If community leaders are incorporated into the schools' executive boards, those using a decentralized approach have a better chance of developing an attractive programme, although this programme may not be that favourable to learning acquisition. For example, in one Sri Lankan school, community leaders cooperated with the principal in developing a strong boxing team. Learning acquisition was not a major focus for this particular school.

National Governments may be willing to consider some combinations: the centralized option could be supported in compatible areas while complemented by other strategies at the edges. Perhaps the major challenge of EFA lies in fostering educational systems that apply varied approaches to accommodate the true diversity of "basic learning needs".

II. Curriculum

Whether a system is run by the centre or the school, decisions about what is to be learned have to be made; these decisions become the curriculum. In recent years, some observers have begun to draw a distinction between the intended curriculum (what Governments or principals decide) and the implemented

[58] World Bank, *World Development Report, 1991*, (Washington, D.C., World Bank, 1991).

curriculum (what teachers actually convey in the classrooms). In many instances, the gap is substantial. This section reviews several of the issues that should be addressed by those who formulate or seek to revise curricula.

Who Should Be Consulted?

Perhaps the most basic task in framing a curriculum is to decide who should be involved. In the early stages of modern education, officials from the central Government assumed the responsibility of setting the curriculum because schools were viewed primarily as a means for cultivating loyalty to the State and its ideology. As nations have matured, however, the purposes of education have broadened, and it has been recognized that a good curriculum depends on consultation with a broader group of people.

Ralph Tyler, seen by some as the father of modern curriculum development, urges careful attention to five different sources of insight: the learners themselves, contemporary life outside the school, subject specialists, philosophers, and the psychology of learning.[59] Tyler points out that exclusive reliance on any one of these groups is likely to result in a distorted curriculum which, though effective in certain settings, may not have an enduring value.

While Tyler apparently believes that experts should have the final word on curriculum development, Sheldon Shaeffer has in recent years urged a more participatory approach where no single group is in control, but rather where all affected parties are involved and feel a sense of ownership.

> *Quality in education has traditionally been defined in terms of inputs, outputs, and processes. Good education must also (1) encourage a more integrated view of development by making students more aware of how their actions, individually and collectively, hinder or help to meet [certain] changes, and (2) mobilize and empower people with the knowledge and skills for more participatory and democratic processes. Such a system must itself become more participatory in nature -- in needs assessment, research, planning, management, evaluation and other activities in which parents, communities, and teachers can be involved more fully. Planners and managers will need to define their work quite differently to become enablers and facilitators, rather than controllers.*[60]

[59] Ralph W. Tyler, *Some Principles of Curriculum and Instruction* (Chicago, Chicago University Press, 1949).

[60] Sheldon Shaeffer, "Educational quality redefined", *Forum for Advancing Basic Education and Literacy*, 1 (3), (January 1992), pp. 1-2.

What Should Be Learned?

Over the past several decades, there has been an ongoing debate concerning the appropriate content for basic education. On one side, there are those who advocate a relevant curriculum containing material that reflects local conditions and that even focuses on activities directly applicable to the local economy and society. On the other, there are groups that support a more streamlined curriculum focusing on the basic academic skills of reading, writing, and numeracy as the only subjects that should be attempted at the primary level. The main tenets of these positions are described below.

Back to the basics. In 1965, Philip Foster wrote a famous critique of "vocational education", pointing out how vocational curricula were often antiquated and failed to teach useful skills. Moreover, employers sought to provide students with academic skills rather than vocational skills; therefore, parents also preferred that their children learn academic skills.[61]

A variety of studies have been conducted to show how academic education, euphemistically referred to as "general skills", has proved more practical than "specialized skills", even for rural and farming activities (see box 18). So, as the argument goes, why waste time on teaching specialized skills, particularly when general skills have been shown to be more relevant for most children?

An ideological element has also entered this debate. Generally speaking, socialist Governments such as Cuba and Tanzania have been the strongest advocates of practical skills; many donors (especially in the bilateral group) have not been inclined to support policies promoted by these countries.

In their recent study on primary education, Lockheed and Verspoor come down squarely on the side of general skills; their introductory chapter stresses a bare-boned curriculum of cognitive competencies including "literacy (reading and writing), numeracy, modernity, and problem-solving behaviors".[62] Based on a recent cross-national analysis of textbooks, they suggest that a remarkable consensus has emerged concerning what should be taught in schools, and this consensus stresses general skills. Elsewhere, they refer to adjustments in the common intended curriculum as a "blind alley":

> *In extreme cases, the curriculum has been "ruralized" -- with courses on agriculture added to the class schedule -- in an effort to make it more appealing to children of*

[61] Philip J. Foster, "The fallacy of vocational education in development planning," *in* Karabel and Halsey (eds.), *Power and Ideology in Education* (Oxford, Oxford University Press, 1977).

[62] Marlaine E. Lockheed, Adriaan M. Verspoor, and associates, *Improving Primary Education in Developing Countries* (Washington, D.C., World Bank, 1991).

farmers. Generally, these small changes in the intended curriculum have been ineffective and resisted by parents and teachers.[63]

Instead, they argue that greater efforts should be exerted to improve the implemented curriculum; the challenge is to teach this common curriculum better than it has been taught thus far.

Box 18
How Primary Education Helps Farmers Solve Problems

Farmers in Kenya were shown a diseased plant and asked about the causes of the disease and about the measures that might be taken to help control or prevent the disease. An unschooled Kenyan farmer mentioned three possible causes of damage to maize: weeds, birds and hailstones. These were given as generic causes of crop damage, and particular kinds of damage were not attributed to specific causes. However, none of these was responsible for producing the disease symptoms in the maize specimen shown to the farmers.

By comparison, a Kenyan farmer with seven years of primary education made a complex causal model which correctly identified the cause of damage and a possible solution:

This is what Amodonde, the stalk borer, does. It attacks the stem and makes it wither at the buds, sometimes without you knowing it. You buy chemicals from the store and apply them when the maize is small, two or three feet high. You spray the buds after the first weeding from the top dressing.

The farmer's understanding of how technology could improve productivity was enhanced by a primary curriculum that taught science in conjunction with farming practices, and emphasized scientific theory over memorization.

Source: T. Eisemon, "Becoming a 'modern' farmer: the impact of primary schooling on agricultural thinking and practices in Kenya and Burundi," *in*: D. Wornen, L. Slikkerveer, and S. Titilola (eds.), *Indigenous Knowlege Systems: Implications for Agriculture and International Development* (Ames, Iowa, Iowa State University, 1989), pp. 41-67.

The central concern of the back-to-the-basics proponents is the implementation of practical steps known to bring quick results. Lockheed and Verspoor question the value of fiddling with the curriculum because these actions take years to work their way into the classrooms. Curriculum changes imply textbook changes, textbook production, textbook distribution, and new teacher training.

[63] Ibid., pp. 1-2 and 51.

Yet today, long after the promulgation of the current curriculum, there are failures in implementation. Curriculum change may thus turn out to be a ploy for postponing action.

Rather than fiddling with the curriculum, this movement urges educators to get textbooks into the hands of children. There are extensive research findings showing the relationship between the prevalence of textbooks and learning, in effect, the textbooks themselves become the curriculum. Figuring out how to supply children with good textbooks is thus a better investment than devoting attention to curriculum change.

The whole-person education. While the basics approach focuses on the three R's, many educators favour a broader approach -- one that cultivates values and skills in addition to the core cognitive abilities -- because they believe that school education should develop the whole person and not just the mind. For example, the basics approach says little about the teaching of national values, local cultures, or religions -- all of which are prominently featured in the goals of most national educational systems. What's more, most systems devote a significant proportion of the curriculum (between 15 and 50 per cent of instructional time) to these subjects. Much of the cultural curriculum is taught through games and other action formats which children enjoy. Might not children turn away from the schools if these fun activities were dropped?

Similarly, the basics approach dismisses the widely held belief that a school education should convey certain practical skills in addition to general skills. One example, of which nearly all educators approve, is using the school as a vehicle for teaching children standards of health and cleanliness, such as the importance of boiling drinking water, brushing teeth, and taking a bath. Many educators also believe that schools should attempt to convey certain values and skills -- for example, teaching respect for labour by having children participate in a school farm or having them take responsibility for cleaning the school grounds.

Will the basics reach all? The back-to-the-basics approach is likely to result in a reasonably sound educational experience in the majority of settings, or at least in the "high demand" settings where parents and children believe in modern education. But what are its implications for the remaining settings, where parents and children are not sold on the benefits of modern education and often look upon the government school with a hostile eye? What is generally true for the majority of cases may not apply in these peripheral settings. Although textbooks produced in the capital city or in some foreign country may be pedagogically sound, they may also give short shrift to local nuances. Manzoor Ahmed, drawing on his comparative analysis of basic education in China and India, observes the following:

> *Cognitive skills are developed effectively among rural learners when the learning content deals with the local environment or agricultural practices. The teaching methods and practices then have to follow an active empirical and exploratory approach instead of a didactic passing on of facts.* [64]

Until an educational approach appealing to these settings is devised, little learning is likely to take place there. In many local settings, educators have launched experimental programmes to develop new indigenous approaches that depart from the basics. The *Escuela Nueva* programme in Colombia (described in the box below) is one of the most interesting examples, as it places an exceptionally strong emphasis on parental and student involvement in school planning and management.

Box 19
Improving Rural Education in Colombia through *Escuela Nueva*

Based on its 1978 study detailing major weaknesses in the provision of basic education in rural areas, the Government of Colombia accorded top educational priority to improving schooling in these areas and developed a comprehensive 10-year Rural Primary Education Plan. The Plan set forth a national strategy for attacking key problems, relying heavily upon the *Escuela Nueva* programme.

The *Escuela Nueva* programme was launched in 1975 after a decade of experimentation. From its official inception in 1976, covering 500 schools in three departments, the programme expanded to 3,000 schools by 1983, and to 8,000 schools -- or approximately 30 per cent of the target schools throughout the country -- by 1987. The programme is designed specifically for multi-grade classrooms in rural areas. Seeking to achieve both educational and social goals, the programme aims to: (a) provide the full five-year primary cycle; (b) improve the relevance and quality of education; (c) improve student achievement; (d) improve educational efficiency and productivity; and (e) integrate the school and the community. The strategies used to implement the programme focus on curriculum, teacher training, administration, and the school-community relationship. The curriculum content, which is readily adaptable to the circumstances of a particular community, is simple and sequential, with an emphasis on problem-solving skills. Presented in the form of semi-programmed learning guides, the curriculum is organized to permit a flexible promotion system. To complement the curriculum materials and to meet the challenges of multi-grade teaching techniques, *Escuela Nueva* has developed a special classroom design based on resource corners, simple classroom furniture, and a 100-book library.

[64] Manzoor Ahmed, "Quality and relevance: concept and practice", *Forum for Advancing Basic Education and Literacy* (1992), p. 3.

Escuela Nueva places special emphasis on teacher training and continuous in-service upgrading. An initial 10-day training workshop introduces the programme's philosophy and content, teaching strategies, school organization, and student evaluation. Two follow-up workshops are given during the year to provide further training, particularly with respect to adapting curricular materials to the needs of the students and the characteristics of the community. Supervisors receive similar training, with greater emphasis on the pedagogical aspects of supervision. Regular and frequent supervisory visitations are an integral part of the programme, their purpose being to provide pedagogical rather than administrative support. An administrative structure has been developed from the central to the local level. At the central level, a national committee ensures that programme policies are in accordance with national goals and objectives. At the departmental level, departmental committees are responsible for planning and implementing the programme and training personnel in the department. Within the school, the programme's operation depends upon the student council.

Escuela Nueva considers the integration of the student, school, and community as crucial not only for the school's effectiveness as a learning institution, but also for the community's responsibility for its own development. A parents' committee works together with the student council to develop joint community-school projects.

Sustained evaluation of *Escuela Nueva* shows sound results. Recent comparisons show that students attending *Escuela Nueva* have significantly higher levels of achievement than students in traditional schools. Student motivation, creativity, and self-esteem are higher; parents express greater satisfaction, and due to the flexible promotion system, repetition rates are lower. Teachers have more positive attitudes towards teaching and are more involved in the community than teachers in traditional rural or urban schools. Studies also show that supervisors see their jobs more positively, with a stronger emphasis on providing support rather than on merely overseeing school operations.

Source: V. Colbert de Arboleda, "Universalization of primary education in Colombia: the 'New School' programme", *in*: C.A. Rojas and Z. Castillo (eds.), *Evaluacion del Programa Escuela Nueva en Colombia* (Bogota, Colombia, Instituto SER de Investigacion, 1988), (draft version).

Not as much is known about these ventures as one might like, for they have not been as carefully researched as mainline education. What *is* known, however, suggests that they are quite promising. Children in these programmes do as well on achievement tests as children in conventional schools, and at the same time acquire strong family and communal values that reinforce the local social structures. In other words, it may be that a modern nation needs to support a range of educational approaches, tailored to the requirements of different settings. One should keep an open mind about various approaches, and resist yielding all the schools to the back-to-the-basics approach.

Significantly, the World Declaration on Education for All takes a broad view. Without committing itself to a specific curricular format, article 1 describes basic learning needs as "content (such as knowledge, skills, values, and attitudes) required by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning".[65,66]

Article 2 highlights the importance of stressing tolerance and humanistic values in basic education, and article 3 focuses on common cultural and moral values. Finally, article 4 refers to the "need to incorporate *useful* knowledge, reasoning ability, skills, and values" in schools.

Core and diversified curriculum. In many instances, the apparent differences between the basics and whole-person curricular camps are not as great or irreconcilable as they may seem. The basics group is firmly convinced that all children should know certain things, although the advocates of the whole-person camp may agree with that, they feel it is not enough.

One sensible approach is to structure a curriculum that includes a core focusing on basic subjects, and then allow generous provision for the development of a diversified curriculum around the core. A central curricular unit might assume responsibility for this core curriculum, while local educational offices or individual schools might be given responsibility for the diversified portions. This approach was recently adopted in Indonesia, where the centre took responsibility for 80 per cent of the curriculum, and provincial and local governments were in charge of the rest. A similar programme began in India in 1984.[67]

What about survival skills? The core-diversity approach opens up the possibility for wider participation in at least part of the curriculum. However, even as this approach gains favour, there will continue to be questions about the content of the core. Should the focus be solely on the basic academic subjects, or should the core be broadened to take on issues which many regard as even more fundamental? In recent years, UNICEF has been particularly forceful in raising this question. Some UNICEF thinkers insist that the world is facing a range of common problems that cannot be ignored by schools, and urge the development of a "survival skills" curriculum which includes a focus on five sub-themes: environmental skills, personal health skills, family life skills, peace skills, and

[65] World Conference on Education for All (WCEFA), held in Jomtien, Thailand, from 5 to 9 March 1990. *World Declaration on Education for All* (New York, Inter-Agency Commission: UNDP/UNESCO/UNICEF/World Bank, 1990).

[66] Gary Theisen and others, *An Analysis of the Status of Curriculum Reform and Textbook Production in Indonesia*. (Florida, Florida State University - Improving the Efficiency of Educational Systems [IEES], 1991).

[67] UNESCO report, 1984.

job-creation skills. This provocative proposal deserves careful consideration. It is hoped that some educators may see fit to experiment with the inclusion of curricular units focusing on these areas in national settings.

Graded progression or mastery? The traditional curriculum divides subjects into subsets of material to be taught in successive grades. Children are expected to more or less master the material in a grade as a requirement for moving on to the next grade. To insure against children who do not master very much, the curriculum includes some repetition of material so that children have a second chance. This approach is sometimes known as "spiralling", because the curriculum steadily moves forward while at the same time systematically circling back for review/repetition sessions. This design can work well if the curriculum does not advance too fast and there is not too much variation in the pupils' abilities and motivation.

In many developing nations, the conditions described above are not realized, the curriculum may be very demanding and there may be a wide variation in pupils' abilities. Under such conditions, large numbers of children may fail to grasp the material of a particular grade level. One option is to fail students and insist on their repeating the grade. Another option, advocated by UNESCO since 1984, is to introduce "automatic promotion", with the expectation that the motivational value of moving forward to a higher spin of the spiral curriculum outweighs the possibility that the child is moving to a level beyond his/her grasp. However, as reflected in the emphasis made by the World Declaration on "learning acquisition", there is an increasingly widespread belief that the automatic progression practice has led to a ritualistic school experience, where children often graduate without learning.

One alternative to the traditional curriculum is what has been called a Mastery Learning (ML) curriculum. In the ML curriculum, subjects are broken down into small units that can be covered in a week or two, sometimes traditional academic subjects are integrated if it is felt this will help enhance pupil access. At the end of each unit, tests are given to evaluate the students' understanding, and those who fail to achieve a mastery level -- a score of 80 per cent, for example -- are expected to go back and review the unit before taking the test again. Only when a student has achieved a mastery level is he/she allowed to move to the next unit.

The ML curriculum can be implemented in a variety of ways. For example, it can be individualized so students proceed at their own pace. Alternately, students can be placed in ability groups which proceed at different rates. Or, as in Indonesia, they can be placed in mixed-ability groups, with all members of the group having to pass the mastery test before the group moves on to the next unit. In this situation, students in the group act as informal tutors to help each other.

grasp the material. Mastery Learning is regarded as one of the more effective means of ensuring learning acquisition.

Bilingualism. Somewhat analogous to the basics-relevance debate is the question of what language should be used for instruction. Many educational systems in formerly colonized areas still use a metropolitan language in the advanced levels of their educational systems and in their modern work-places. Therefore, some argue that the children should learn in the metropolitan language, because learning in another language is a waste of resources and reduces a child's future opportunities; the same people even suggest that parents prefer their children to learn in the metropolitan language. However, as indicated in two recent studies, parents change their minds once they see the positive results of a bilingual approach (see box 20).

Box 20
Improving Equity through Bilingual Education

Bilingual programmes in Guatemala and Nigeria have helped to facilitate school participation for children whose home language is different than the official or national language.

Historically, language was a major reason for the limited access of the indigenous Mayan population to educational opportunities in Guatemala. While most children from this population spoke a Mayan language, the language of instruction shifted to Spanish. In the pilot bilingual programme introduced in 1980 in 40 rural schools, children were taught in one of four major Mayan languages (there are more than 200 Mayan languages) in the first three grades and then instruction was shifted to Spanish. As is often the case with bilingual programmes, in the beginning parents showed some resistance. They thought that their children would receive an inferior education and were afraid they would not learn Spanish. These concerns were overcome when parents saw the improvements in children's achievement and their mastery of Spanish along with the indigenous language. In 1986, the bilingual programme (PRONEBI) expanded to 400 schools. In 1990, approximately 800 schools participated in the programme. In fact, the national law now requires bilingual education in rural Mayan-speaking communities.

A project in Nigeria shows that teaching in the native tongue throughout primary school can facilitate learning without impeding acquisition of the second "national" language. While English is the official language of Nigeria, the native language of 15 million people in western Nigeria is Yoruba. Beginning in 1970, the Institute of Education at the University of Ife launched the "Six-year Primary School Project", using Yoruba as the sole medium of instruction throughout primary school. English was taught as a second language. Non-project classes had three years of instruc-

tion in Yoruba and three in English. At the end of their primary education, project children were significantly ahead of non-project children in all school subjects, including English. On the public examinations, project and non-project children performed equally well. In secondary schools, project students retained an academic advantage over non-project students in mathematics, Yoruba and English.

Source: R. Chesterfield and H.N. Seeley, "Process evaluation of the Programa Nacional de Educacion Bilingue (PRONEBI)", *Final Report* (United States Agency for International Development/Guatemala and PRONEBI, 1987); and A. Babatunda Fafunwa, "Education in the mother tongue: a Nigerian experiment", *Journal of African Studies* (1987).

There is considerable evidence indicating that a child who begins school in the language spoken at home does better than a child who begins schooling in an alien language. While educators agree on the value of beginning school in the home language, they differ on what should follow in later years. Table 24 outlines the principal options. The various bilingual options involve different approaches which enable a child starting in an indigenous language to acquire a mastery of the metropolitan language. The more complex the policy, the more difficult its implementation and the greater its cost.

Table 24. Characteristics of Language Programmes

Language programme	Medium of instruction	L2* as a subject	Children's use of L1**
Submersion	L2	No	No
Transitional bilingual	L1-->L2	Yes-->No	Yes-->No
Maintenance bilingual	L1-->L1 and L2	Yes	Yes
Immersion			
Structured	L2	No	Yes-->No
Revival	L1	No	Yes
Home language	L1	Yes	Yes

Source: William K. Cummings (ed.), *Reaching Peripheral Groups: Community, Language and Teachers in the Context of Development. Special Studies in Comparative Education*, No. 31(New York, State University of New York at Buffalo).

* L2 corresponds to second language.

** L1 corresponds to native language.

Lockheed and Verspoor note that successful systems in the developed world all teach in a single national language. While acknowledging the linguistic complexity of many third-world nations and the value of having children begin their schooling in their home language, the authors argue that it would be very costly for a nation to encourage the persistence of multi-lingual education beyond about Grade Three. Instead, they favour minimal "transitional bilingualism" converging on a single national language for all children.

Clearly, however, cost is not the only consideration that nations will wish to weigh when making this curricular decision. For example, the World Declaration observes that "literacy in the mother tongue strengthens cultural identity and heritage"; elsewhere it observes that "traditional knowledge and indigenous cultural heritage have a value and validity in their own right and a capacity to both define and promote development." The bilingual strategy a nation chooses will have a profound impact on the evolution of its national culture. Is integration or segregation the goal, or is one subgroup expected to be assimilated into another?

Hidden curriculum. Most of the attention of curriculum developers is focused on the content and sequencing of academic subjects, a circumstance leading curriculum discussions to focus exclusively on these issues. However, a number of observers have pointed out that the school teaches much more than these subjects, through what is sometimes called the hidden curriculum. In the days when modern schools were first developed, many educators were fascinated with the demands of the factories and modern offices where many school graduates would find jobs. In these offices, bosses sought workers who were punctual, obedient, hard-working and clean. These concerns led to the development of a school schedule which started early in the morning and was full of demands for as many hours as the educators felt young people could last; the schedule was designed to teach the rhythm of the factory.

Independently of what appears in the textbooks, there are many other ways that a school can teach the lessons of life. In most East Asian schools, children have extensive responsibility for janitorial and service functions. For example, groups of children are formed to empty waste-baskets, clean blackboards, clean and groom the school grounds and athletic fields, and prepare and/or deliver snacks and lunches. Children may also be in charge of announcements, take attendance, and even become involved in certain instructional tasks. It turns out that children with these experiences replicate them in the work-place later in their lives. Thus, a Korean or Japanese executive is likely to empty his own waste-basket rather than depend on a janitor; more generally, the Asian executive has a healthy regard for those who do "dirty work", for he or she has already done this type of work while in school.

Extracurricular activities can also teach other lessons. For example, Australian schools do not support athletic teams for inter-scholastic events, though they do support debating teams and math teams -- the message being that schools are places for study. On the other hand, local clubs support these athletic teams, and welcome youth only if they maintain certain academic standards. Again, the message is that good performance in school is important for access to valued opportunities outside of school.

Little "hard" research has been done on the impact of the hidden curriculum, primarily because the research community -- fixated on the narrower issue of learning the formal curriculum -- does not allocate funds for these "frivolous topics". However, it seems clear from these and other examples that the hidden curriculum can make a big difference in pupil motivation and even in learning acquisition (particularly of values and skills).

The hidden curriculum -- sometimes called the co- or extra-curriculum -- provides a rich area for innovations. A recent survey indicates that many of these innovations can be easily introduced either inside or outside the school. Singapore, for instance, has used public campaigns to promote family planning, marital solidarity, and sincerity. Other nations stress periods of obligatory military service or public service as a means of leading young people through value-shaping experiences. Media and other channels may be as important as the school for conveying the lessons often associated with the hidden curriculum. (See table 25 for a list of the various sources or agents of a values education.)

Time on task. Most educators agree that the amount of time children spend on learning is significantly related to how much they learn. The issue of time can

Table 25. Sources of a Values Education

Sources	Sector	
	Private	Public
Family	xx	
Primary schools		xx
Secondary schools and universities	xx	xx
Youth organizations	x	x
Military education		x
Adult institutions	x	x
Campaigns and public events		x
Media	x	x

Source: William K. Cummings, S. Gopinathan, and Y. Tomoda, *The Revival of Values Education in Asia and the West* (New York, Pergamon Press, 1988), p. 176.

Key: xx = important in most societies; x = important in some societies.

be addressed at several levels. At the national or local level, Governments can set out guidelines for the numbers of hours children should spend on different subjects. As it turns out, in many developing countries the numbers are modest and should be increased. A recent study indicates that Paraguayan children are expected to spend only 800 hours a year in school, compared to an international average of about 1,100 hours. To get as much exposure as other children do in four years, Paraguayan children would have to go to school for more than five years.

At the school level, time can be dealt with in a another way. In some communities, children have duties or other obligations at certain times of the day or year; local schools might therefore adjust their calendars to make concessions for special festivals, harvest seasons, or other obvious contingencies.

Finally, distinct from the amount of time that children spend in school is the quality of that time. In some classrooms, children diligently apply themselves and have good materials to work with; in others, time is not well used.

III. Instructional Materials

Whatever stand an educator defends in the curricular debate, he/she invariably concludes that children need instructional materials. The paucity of instructional materials in many nations is shocking. Table 26 summarizes the results of a recent World Bank survey on the availability of textbooks in selected developing countries; in several of these countries, there are essentially no textbooks.

Some traditional forms of education have relied primarily on the oral teaching method, but modern education seeks to move beyond memory to convey the power of arithmetic and alphabetic symbols, and their reorganization through analytical and critical thinking. Thus, in modern education, the need for instructional materials is axiomatic.

How much instructional material is needed? Instructional materials typically command a remarkably small proportion of educational budgets, ranging from virtually zero to a maximum of 5 per cent, where every child has texts and workbooks in all subjects. Research shows that the returns in learning acquisition from the presence of textbooks are very high [58,59]. Where textbooks are available, it is possible to ease requirements regarding teachers' time. For

[58] Dean Jamison and others, "Improving elementary mathematics education in Nicaragua: an experimental study of the impact of textbooks and radio on achievement", *Journal of Educational Psychology* 73(4), (1981), pp. 556-567.

[59] Stephen P. Heyneman, Dean Jamison, and Xavier Montenegro, "Textbooks in the Phillipines: evaluation of the pedagogical impact of a nationwide investment", *Educational Evaluation and Policy Analysis* 6 (2) (1984), pp. 139-150.

Table 26. Textbook Availability in Selected Countries

Country	Percentage of students without books	Description	Distribution		
			Supplied	Purchased (with subsidy)	Purchased (without subsidy)
Low-income countries					
Burkina Faso	33	Cost of French book (US$ 3.00) is too high for low-income families			x
Comoros Islands*	67	One in three students has a French language book	x		
Central African Republic	Not available	National average of one book per nine students. No books are available for rural pupils	x		
China	0	Each student has a new textbook each semester for each subject		x	
Equatorial Guinea*	100	Books are only available in urban schools due to poor distribution systems			
Guatemala	75-100	One in four students had books in 1974, but 10 years passed with no further production. Books are virtually absent from classrooms		x	
Haiti*	75	Only one out of every four rural children has access to a textbook	x		
Madagascar	Not available	Most schools lack textbooks. Those available are old and in bad condition			

Table 26. (*continued*)

Country	Percentage of students without books	Description	Distribution		
			Supplied	Purchased (with subsidy)	Purchased (without subsidy)
Low-income countries					
Mozambique	Not available	Supply is good in towns but very poor in remote areas. Prohibitive fees impede student access to books	x		
Niger	Not available	The State supplies French books at a ratio of one book for every four students	x		x
Pakistan*	50	Students in rural areas have limited access to textbooks		x	
Rwanda*	87	One pupil in eight has a set of books in Kinyarwanda and French and a math book		x	
Sierra Leone*	25-65/100	Virtually all students in provincial schools are without textbooks	x		
Togo*	Not available	Books are expensive; 20 students frequently share one book		x	
Uganda*	40	Some 3,400 schools still did not have books after a World Bank-sponsored project supplied textbooks to 5,400 schools	x		
Zaire	Not available	Many schools have no pupils' books		x	

Table 26. (*continued*)

Country	Percentage of students without books	Description	Distribution		
			Supplied	Purchased (with subsidy)	Purchased (without subsidy)
Middle-income countries					
Lesotho*	Not available	About three students per book	x		
Nigeria	98	Barely acceptable provision of books in Ibadan State and in Lagos. Only two books per 100 students in northern rural districts	x		
Paraguay	67	One out of every three pupils has a book. One in every 50 students has all four required books	x		
Peru	67	Two thirds of the students in rural areas have no books		x	
Tunisia	0	All pupils have copies of books that teachers asked them to buy		x	
Turkey	Not available	Good availability of books in larger cities. There may be a shortage of books in rural areas			

Source: World Bank, "Textbook availability review" (London Publishers Association, 1989).

* Denotes countries in which World Bank (International Bank for Reconstruction and Development, or IBRD) textbook projects were implemented. Data are pre-project.

example, in many national settings, teachers who have textbooks have little difficulty in handling relatively large classes of more than 40 students.

In an ideal context, every child should have a textbook which he/she can take home to review, share, and discuss with his/her parents, brothers, and sisters. However, good results can be achieved even when children share textbooks in school. One arrangement is to store textbooks in a common facility and arrange a daily schedule so that, for example, children in one class of a common grade study the national language while children of a second class study arithmetic. Where arrangements of this kind are made, the ratio of children to texts can move upwards to as high as 10 to 3 or 4 to 1. Ideally, however, every child should have his/her own workbook.

Issues of instructional material content. Different curricular/instructional designs imply different instructional materials. The traditional textbook has the advantage of being substantial and durable. New approaches to instructional design tend to break subjects into larger numbers of units, and they often encourage the production of discrete mini-books for each of these units. Where this is implemented, the possibilities for the sharing of materials among pupils multiply. For example, even in relatively small schools, children of the same grade can work on different modules of a common subject.

Research indicates that especially when a modularized design approach to instructional materials is relied upon, significant learning dividends can be obtained when children have workbooks and teachers are provided with instructional guidebooks that are related to each unit.

Whatever the format utilized, a number of general rules apply to the development of materials. It is important to work for clarity, ease of comprehension, the orderly sequence of topics, and variety in the content. Above all, the materials should keep the child in mind. Teachers tend to be better writers of instructional materials than professors (who often have never taught in a primary classroom). Finally, in developing materials it is important to evaluate them before they go into large-scale production.

The production of instructional materials. In the past, a major obstacle to the development and distribution of instructional materials was the complexity of the task. To keep costs reasonable, large quantities had to be produced, which typically involved establishing facilities. The mere thought of creating such facilities led many educational leaders to shy away; some education systems authorized the production of textbooks abroad, while others simply remained inactive.

These fears are now largely dated, however. Today, available technologies allow for vastly simplified production, so that high cost-efficiency can be

achieved with no more than a few thousand editions Desktop publishing techniques are behind many of these new options, the major requirement is to have an individual familiar with word processing and a related array of printing facilities The lowest cost is achieved with black and white production, though the inclusion of from one to three colours does not add much to the overall expense

The availability of new technologies allows for the establishment of facilities for the production of instructional materials in provincial and local educational offices, alternately, local educators can rely on private-sector publishers

These new technological breakthroughs make a localization of curriculum much more feasible than could have been imagined even five years ago Unfortunately, many educational leaders are not aware of the new possibilities, and continue to hinder the development of instructional material

IV. Instructional Methods

At the level of basic education, the classroom is the primary locus for promoting learning acquisition Curriculum guidelines and the availability of instructional materials set constraints on what is possible What actually takes place, given these constraints, can be referred to as "instructional practice"

Learning acquisition is better when this practice follows a method -- but what is the ideal method? In recent years, increasing attention has been focused on "time on task" Children generally spend only a few hours a day in class In some classrooms, less than half the time is devoted to learning, with the rest spent waiting for the teacher to come, waiting for other children to quiet down, or waiting for instructions In other classrooms, as much as 90 per cent of the time is spent on learning tasks

Distinct from time on task is the quality of that time Accordingly, the World Declaration asserts that "active and participatory approaches are particularly valuable in assuring learning acquisition and allowing learners to reach their fullest potential"

Classroom time can be carefully planned either at the school level or (as in the Korean example) at some higher level in the system In most national systems, however, there seems to be little systematic planning of what should go on in classrooms Reviews of national curricula and programmes at teacher training institutes suggest that national systems do not devote systematic attention to formulating ideal instructional methods; at best, they attempt to familiarize teachers with various options More often than not, they sidestep the issue in the belief that knowledge of the subject matter is more important than method; in other words, teachers are born, not made

While national systems may not devote adequate attention to formulating ideal instructional methods, it must be recognized that the international research literature on this topic also has serious limitations. There are relatively few studies about what occurs in classrooms, and those that are available tend to be influenced by implicit models of effective teaching that may not have relevance in particular national contexts.

Western observers' biases are perhaps most evident when they describe Asian classrooms. These observers express dismay at the high student-teacher ratios, the teacher-centred format of the curriculum, the disciplined nature of classrooms, and the apparent stress on the rote memorization of material. Although observed instructional methods are often negatively portrayed, they have been shown to achieve impressive results in terms of effective time on task, curriculum implementation, and student learning acquisition and comprehension.

Beeby's classic survey of teaching proposes a series of stages in the evolution of instructional methods, beginning with the dame school, progressing on to something similar to the Asian mode of formalistic teaching, and finally reaching an even higher stage where pupils participate actively in the classroom process and teachers respond to the individual needs of their pupils. Beeby urges national systems to chart their progress towards this highest stage. Gerald Guthrie offers a thoughtful critique, however:

> *Formalistic teaching involves the organized processing of fixed syllabuses and textbooks, with the main emphasis on memorizing basic facts and principles. Teachers dominate roles, with students generally passive, although limited overt teacher-student and student-student interaction may be permitted under conditions strictly controlled by the teacher. Students are often set individual work, but other types of activity, such as group work, are infrequent. While many modern educationists do not approve of formalism, it is desirable and effective in many educational and cultural contexts. It is compatible with societies that value respect for authority and regard ritual as meaningful in itself. It is consistent with formalistic teacher training, inspections, and examination systems, providing a base on which to build in the many situations where teachers and students feel comfortable with it. Its functionality in schools and classrooms with poor facilities is a positive asset, although good facilities will make it more effective. In these contexts, the question to ask is not, how can we improve the quality*

of teaching by promoting alternatives to formalism, but how can we improve the quality of formalism?[70]

Recent innovations in programmed instruction and learning include the proposed adoption of instructional methods that resemble those advocated by Guthrie. For example, the Korean example cited at the beginning of this chapter relies on a highly formalized instructional format, enriched by a sophisticated system of formative and summative evaluations to gauge student progress.

Much of the current literature on instructional methods does not specify which of these methods are appropriate for different subject matter. Specialists in instructional design, however, point out that some subjects have a clear logical order which should be presented in sequence, while others need not follow a prescribed order so closely. It may also be that different subjects require different methods. For example, social sciences and literature may be better taught through participatory group methods, whereas arithmetic might be better taught using a more traditional format.

Values education raises a different challenge. Some educational systems primarily stress mastery of the cognitive dimensions of values education, and even require students to take paper and pencil tests on "correct values". However, most systems prefer to encourage children to reflect on values and act them out. In such cases, a more experiential approach involving student participation in games or projects is advocated. For instance, one useful approach is to conduct a guided student discussion of an ethical dilemma presented in a story or a video. Again, as is the case with other subject areas, it is possible to develop instructional materials and methods that are known to be effective in values education.

V. Professionalism

In most schools, teachers are the key to learning acquisition. They are the ones who implement the curriculum with whatever resources they have on hand, and thus create the instructional method.

Some people are born teachers -- that is to say, teaching is their calling. They have an instinctive sense of what works and a sufficient knowledge of the subjects they are required to teach; moreover, they love their jobs and continually seek to improve. However, there are also many teachers who were not born to teach. They become teachers because someone urged them to take the job because the village needed a teacher, or, as they went through high school and faced the tough competition for college, they recognized that they were not cut out to be doctors.

[70] Gerald Guthrie, "In the defense of traditional teaching in lesser developed countries," in: Val D. Rust and Per Dalin (eds.), *Teachers and Teaching in the Developing World* (New York, Garland Publishing Inc., 1990), p. 228.

or lawyers. Because teaching was but an optional second or third choice for these people, who did not spend much time thinking about teaching until they finally chose the career, training is critical for enhancing the performance of the vast majority.

Teacher training. Traditionally, training existing primary-level teachers has been carried out in specialized teacher training schools that provide a one- to three-year course on some level of secondary education. The limited available research does not always confirm the value of teacher training in promoting learning acquisition, especially relative to the importance of general academic training. David Chapman and Conrad Snyder suggest several possible reasons for the often modest impact of teacher training: it may be too short, it may fail to provide the required knowledge and/or skills, the trainees may not be given opportunities to practise what they have learned in their classrooms, and there may be too big a difference between what is taught in training and the actual conditions of the classroom. For example, many teachers teach in multi-grade classrooms, but few programmes provide preparation for such settings. Also, teachers may have to teach in bilingual settings, but do not have sufficient knowledge of the appropriate languages or a proper understanding of how to implement the official bilingual programme.

Good teacher training programmes contain a mix of professional and subject-matter courses, and include some supervised teaching practice in the settings in which teachers are likely to work. In recent years, a number of teacher training options have been devised, as nations may wish to rely on more than one approach to respond to the challenge of different settings.

Teacher enrichment. Apart from formal teacher training, there are programmes for teacher enrichment to stimulate practising teachers. Indonesia has been experimenting with one such programme in the Cianjur district for over 10 years, and has recently decided to expand it on a national scale.

> *The Cianjur Project was based on two major thrusts: first, to change what happened in the classroom, and second, to introduce a change from supervision and inspection to support. At the start of the project the classes were organized along traditional lines, with the children sitting in rows facing the front, and the teacher dominating the work, taken largely from textbooks. Little opportunity was taken to explore learning experiences outside the classroom. The routine of the classes changed little from day to*

[1] David W. Chapman and Conrad W. Snyder Jr., "Is teacher training associated with teachers' classroom behavior in the third world?" (mimeo), (1989).

day, with the minimum of interaction between the teacher and children or among the children. The rooms generally were dull and uninteresting. The Cianjur Project sought to bring about dramatic changes in the classrooms and to make the children active participants in the lessons that were organized. The classrooms were rearranged to introduce groups, and the lessons were to be centered around a variety of learning activities which were intended to provide opportunities to explore topics being covered and to reach conclusions. Interaction between the children and the teachers was encouraged. An emphasis was placed on stimulating the production of work and the results were displayed. A heavy emphasis was placed upon the use of environment. The stress on activity methods led to the adoption of cara belajar siswa aktif *(student active learning) as the label of the Project."*[2]

To bring about these changes, informal training seminars (called "clubs") were set up at several levels. At one level was the teachers' club, which met informally but on a regular basis during school hours. A teachers' centre was established on the grounds of one of the member schools, though the club shifted its meeting place from school to school. At the club meetings, teacher consensus proved to be an important motivation for implementing changes; teachers discussed their methods with experts from the Project and together sought to devise new approaches. At a second level, the involvement and support of local supervisors proved critical in bringing about the desired changes. Recent evaluations indicate that this programme has had a very positive impact on learning acquisition and on certain patterns of behaviour (i.e., there is a greater degree of independence and a willingness to express opinions).

Analogous to the Cianjur programme is the cluster arrangement developed in Thailand. Primary schools there are organized in clusters of eight to ten and linked to a core school. Adjacent to the core school there is a special learning centre equipped with various specialized instructional materials and teaching aids. A teaching specialist appointed to the centre is assigned the responsibility of developing a programme of teacher enrichment. It is said that this approach works in certain clusters, especially those where the principal of the core school establishes a collaborative environment.

Sri Lanka has developed a similar approach, establishing clusters and organizing cross-school enrichment seminars. However, in contrast to Thailand's

[2] Roy Gardner, "Case study: the Cianjur Project", *in*: Val Rust and Per Dalin (eds.): *Teachers and Teaching in the Developing World*, (New York, Garland Publishing Inc., 1990), pp. 83-94.

experience, the implementation of this approach in Sri Lanka does not require the additional expenses of a learning centre or a teaching specialist, as senior teachers take responsibility for running these seminars on a rotating basis.

Strategies for teacher professionalism. Teachers are concerned with developing their professional skills, and when appropriate arrangements are made, they will make considerable sacrifices to achieve that end.

VI. Management and Evaluation

While teachers are the front-line actors in promoting learning acquisition, their work can be facilitated by supportive management and evaluation practices. These practices may be carried out primarily at the school level. When a system (or at least some of its components such as testing and evaluation) is administratively centralized, this support may come from higher levels.

Regardless of whether a system is centralized or not, the bulk of a child's learning takes place in school -- and some schools are more conducive to learning than others. Extensive research has been carried out in an attempt to specify the main characteristics of effective schools.

The principal's role. Most research results indicate that the principal plays a key role in shaping the effectiveness of a school. Good principals focus on the school's core mission -- learning acquisition -- and thus devote significant amounts of their time to observing teachers and helping them achieve their goals. Principals combine observation with periodic reviews of both pupil and class performance, focusing their efforts on problem areas. These same principals also develop programmes for fostering good relations with their own and with neighbouring communities, organizing special school cultural and sports days, and encouraging pupils to contribute to important community activities, for example, children may volunteer to help build canals or roads, and the school band may perform at community festivals.

Supervision. In most systems of education, public schools are coordinated with central offices through a hierarchical system of supervisors and regional offices. While supervisors are given job descriptions that include both inspecting schools and helping them in their educational programmes, they are often unable to accomplish both tasks. This may be because they are out of touch with what works in the classrooms, but more often it is because they find it difficult to get to the schools; they are responsible for too many schools over too wide an area.

Sri Lanka recently introduced a management reform which sought to shrink the size of the central bureaucracy and place a greater proportion of the supervisory system close to the schools. One element of this reform was a reduction in the supervisors' geographic areas of responsibility. As indicated

below, this reform had a positive impact on the schools, and was even associated with increased learning acquisition

Of course, one possible measure to improve the supervisory system would be to expand the role of the school head, enabling him or her to assume a leadership role and allowing the school to shift to a self-management mode In public systems where a central office provides support and wishes to relate this to school performance, new monitoring systems based on expenditure reports and standardized achievement tests could serve as substitutes for the reports of inspectors To date, no system has achieved a complete replacement of supervisors with these new information-based approaches and techniques of assessment However, Thailand has instituted a sophisticated information-management system that provides some of these services

Assessment and mastery. The climate for improving information management has clearly taken a positive turn over the past decade Those supporting the basics approach stress a relatively narrow 3 R's curriculum, while other educators -- whose views tend to be reflected in the World Declaration -- favour a richer approach which includes both practical skills and a strong confirmation of national and/or local values and beliefs While there are differences concerning what should be taught, there is increasing recognition of the importance of stressing learning acquisition Educators agree on the need for systematically assessing pupil mastery of their lessons as one means of ensuring acquisition As the World Declaration puts it

> *It is, therefore, necessary to define acceptable levels of learning acquisition for educational programmes and to improve and apply systems of assessing learning achievement*

Who should carry out this assessment? At one extreme is the day-to-day classroom assessment by the teachers in charge, which is the approach now followed in most developed nations Schools often supplement this classroom assessment with periodic standardized tests to evaluate how much progress their children are making relative to children in other schools At the other extreme, there might be national tests conducted on a comprehensive basis or through some sampling format The national approach, while often intimidating to children in the less promising schools, enables central policy makers to achieve a better grasp of what is going on

Manzoor Ahmed suggests that the World Declaration was less than clear in addressing these options He argues that the two forms should not be seen as opposing options but rather as complementary to one another Firm progress towards EFA cannot be realized until more is accomplished in developing the national approach

Quality is not an absolute concept, but is related to defined goals in terms of learning outcome and the universality of basic education coverage. Clarity of goals helps develop the concept and criteria of quality. An operational concept of quality focusing on what is learned, by whom, and how is synonymous with the concept of relevance. To ensure that quality criteria are applied and quantity is achieved in basic education it is essential to set minimum or common levels of achievement in learning for all, define to the extent possible measurable indices for achievement, and assess the performance of the educational program."[3]

One approach involves standardized assessment tests such as those that have been developed in Thailand. Alternatively, a school system might introduce or reform "high stakes" exams that play a role in student promotion and selection. Kenya has taken the latter path, with salutary results.

VII. Community

Explicit in much of this chapter's discussion has been the merit of establishing closer school-community ties as another means to promote learning acquisition. The previous chapter contained a fairly comprehensive review of the various approaches that might be considered.

Schools can take the lead in strengthening school-community relations. One positive step is for school personnel to live in the communities they serve. Several studies have shown a positive relationship between learning acquisition and the proximity of both the teacher and school-head residences to the school.

Another positive action that a school can take is to organize a parents' association. Parents' associations in Viet Nam are reported to have taken very aggressive steps to promote learning acquisition.

While it is very important to promote school-community relations, it is also important to keep in mind that schools in the more marginal settings may experience some difficulty in attracting weak or considerably stressed communities. For example, there may be many single-parent homes, and some parents may have exceptionally heavy work schedules. In such cases, the schools should consider taking extraordinary measures to reach out to parents. For example, teachers might initiate a programme of home visits, or establish special after-school programmes for the children of these homes under stress.

[3] Kenneth D. Jenkins, "Restructuring a U.S. school," *Forum for Advancing Basic Education and Literacy* 1 (3), (January 1992), pp. 11-12.

In sum, schools should get to know the communities they serve and to fashion programmes responsive to the special needs of these communities. Such efforts are invariably rewarded with a positive response.

Chapter Seven

MANAGEMENT INITIATIVES FOR REACHING THE PERIPHERY

Sound educational management is thought to be essential for realizing effective education, especially in the periphery, but what strategies need to be adopted? The background document for the World Conference on Education for All devotes one quarter of its text to various management strategies that can be executed at the national level.[74]

Are the strategies identified in this document sound? Interestingly, of all the national-level management ideas proposed by the drafters of this document, only the proposal to "strengthen partnerships" was finally incorporated in the World Declaration. This suggests considerable ferment concerning "what works" in the improvement of educational management. The fact is that educators are not really sure.[75] This chapter seeks to depict this uncertainty by contrasting two management approaches and their implications.[76] With respect to each of them, the following questions are asked: What combinations of school and higher-level management initiatives will be most effective for reaching the periphery? What management initiatives will, along with improving access and learning, also promote greater efficiency in the use of scarce resources?

Management Models

Management consists of those activities that secure, direct, and energize people and resources for the realization of common values. There are various ways to carry out these activities.

Modern management. Much of the current understanding of management strategy derives from an approach that emerged in the nineteenth century, as

[74] Chapter five focuses on such activities as assessing needs, defining targets, planning, creating a supportive policy environment, improving managerial, analytical and technological capacities, mobilizing information and communication channels, building partnerships, and mobilizing resources. ("Meeting basic learning needs: a vision for the 1990s", World Conference on Education for All, Jomtien, Thailand, 5 to 9 March 1990, pp. 79-98.)

[75] A cautionary note is offered at the outset. While much has been made of effective management and quite a lot has been written, the bulk of this is opinion. In contrast to the evidential support of the initiatives stressed in chapters five and six, the scientific basis for this chapter is weak.

[76] Management theory is a fertile field, and the list could be extended almost indefinitely. What the authors seek to do here is to contrast the conventional theories that focus on improving conditions within organizations with a new (and yet inadequately developed) group of theories that focus on improving the conditions of the clients of organizations. The former theories are sometimes given names such as Theory X, Y, or Z. So this new group will be given the name "Theory P" to reflect an interest in developing a management approach that helps the periphery.

modern States attempted to assert control over large territories and expand their authority. The modern State had a mission: to impose its culture on as wide an area as possible, neutralizing (or even eliminating) traditional culture, which was so often hostile to church and State values. The State was successful to the extent that many people bought into the State's values. In most instances, the State had been established by the bourgeois classes and served their interests; as the bourgeoisie expanded, so did the State's penetration. The State even extended beyond its original base. At a certain point, however, the State encountered a zone of indifference and even of resistance -- what James Williams calls a "low demand" setting; at that point, the State's efforts to push modern culture slowed. The modern State provided various services, with the aim of receiving loyalty in return. It sought to be efficient in the provision of these services, which led to a willingness to limit efforts when faced with obstacles, as in the periphery.

Over the course of the modern period several styles emerged. For example, continental Europe -- and later Japan and the socialist nations -- adopted a centralized approach, while in England and the United States, authority was located in local governments.[77] However, within the respective levels of authority, there were considerable similarities in the basic principles of management.[78]

The modern model incorporates a top-down, multi-level management structure. While primarily designed for other sectors (notably the military and the capitalist manufacturing sector), this model has been widely adopted in the developing world for the delivery of education. In the educational sector, its objectives can be characterized as follows:

- Management arranges for the construction of schools in as many locations as is feasible.
- Management designs the inputs for these schools, with particular stress on a centralized, integrated, and highly nationalistic curriculum, and on the provision of teachers who believe in the main tenets of this curriculum.
- Management delivers inputs to the schools.
- Management establishes a system of top-down supervision in an effort

[77] William K. Cummings and Abbey Riddell, "Alternative policies for the finance, control, and delivery of basic education," HIID Development Discussion Paper No. 422-ES (Cambridge, Massachussets, Harvard Institute for International Development, May 1992).

[78] The management literature has tended to rephrase these national styles in the abstract language of Theory X (the continental model), Theory Y (the more participatory American model), and Theory Z (the more inclusive and humanistic Japanese model). W. Scott provided an interesting comparison of these different modern approaches, neatly summarized in Peters' and Waterman's well-known study, *In Search of Excellence* (see note 88).

to ensure that the inputs are correctly deployed according to central guidelines

This modern approach has resulted in a considerable expansion of educational opportunity -- but it may have reached its limit. As already noted in the chapter on access, management costs are increasing and enrolments are peaking.

The visible indicator of the limitations of the modern approach is the failure to realize Education for All. In most nations enrolment ratios have plateaued, with only three quarters of the young children in school. Another sign of this failure is the growing level of alienation among those enrolled. The modern management model, while professing to offer equal educational opportunity to all citizens (in France) or subjects (in Prussia) was and is, in fact, geared towards instilling loyalty and docility in the common man, while biasing educational opportunities towards the urban middle class. The modern model is not for the periphery. The main problem is its alienation from the general public.

Periphery model. The second half of this chapter contains the outline of a new approach to educational management, tentatively called the periphery model, or Theory P. This approach is advanced specifically for education, though it has wider applications.

Theory P views people -- specifically, pupils and their parents -- as full partners in the educational or human development endeavor. It proposes a fundamental reordering of existing management systems.

- Management starts with the needs of the periphery rather than the goals of the centre.
- It focuses on strengthening the understanding of values rather than producing and distributing products.
- It responds directly and flexibly to different needs rather than by uniform regulation.

Many recent management reforms (and related theories) include elements of Theory P.[3] This chapter will examine why Theory P is emerging as the preferred or inevitable management approach, as well as some of the steps or initiatives that go into institutionalizing this new approach. Particular attention will be given to the implications of Theory P for access, learning, and efficiency.

[3] For example, excellence, total quality movement, and full-service movement. (see Taichi Sakaiya, *The Knowledge-Value Revolution* [Tokyo, Kodansha International, 1991])

I. The Modern Approach

The Strategic Role of Management

It must be acknowledged at the outset that the classical management system has evolved to give managers a strategic role in the current educational quagmire

In earlier times, strong rulers or parties (or in corporations, strong owner-rulers) set up modern organizations These self-appointed rulers thought of themselves as spokesmen for the people Management was hired merely to implement the ruler's programme

Over time management became more professional, and was thus able to show greater initiative Adding to the authority of management were the civil service reforms that resulted in increased competence in the management ranks

Management has continued to be responsible to the official Government, whether hereditary or elected However, in certain sectors, including education, the Government has come to defer in an ever-wider range of decisions to the top managers, as they are devoted to their task full-time and are in command of the requisite information and people

Management has, over a period of time, divided its tasks into subgroups that have become the responsibility of distinctive units The following is a typical list of the differentiated categories of tasks that management is responsible for in the delivery of modern education

- Fiscal (through taxes and user fees)
- Information (through censuses, registration and surveys)
- Professional (through civil service)
- Soft technology (through curriculum committees and textbook production)
- Physical plant (through school construction services)

However, with the growth in the scale of education, and hence the growth of the management bureaucracy (and often its increasing isolation from clients) the problems related to realizing these tasks have multiplied

In the realm of education, this style of management had already reached its limit in the first modern societies by the first decade of the twentieth century However, it was later diffused more broadly to developing countries, so it still achieved gains into the 1970s, before education experienced a global waterloo

The Limitations of Modern Management

The indications of modern management's crisis are manifold, some of the key areas are listed below

The class bias of modern education. The modern State has typically been formed by and for the benefit of the rising middle class; in education, much greater stress has therefore been placed on secondary and especially higher education to facilitate access to jobs in the modern sector -- i.e., in large corporations and the civil service. The major public educational institutions have typically been established in or near large cities, and the schools most successful in sending students for higher learning have also been primarily urban. In some nations, unit costs for universities are 80 times greater than they are for primary schools.

Critics of this urban bias have proposed a major reallocation of public funding towards basic education, with tertiary education relying more on user fees.[80] As might be expected, these proposals have met with some resistance from the established classes. An alternate proposal has been put forth which encourages "community support of schools" -- however, this proposal assumes a willingness on the part of the communities to support the schools they control.[81]

Modern managers seem unwilling to give up a system that directly benefits their own class interests. Where modern management is in place, the only hope for those in the periphery may lie in their creating their own initiative outside of the established system.

The lack of appropriate knowledge. Modern education is essentially a system of schools, and relies primarily on the components of this system for its information. The staff of these schools fill out periodic reports on their needs and on local conditions, and higher levels review these reports as a basis for planning and procurement. In the early stages, during the establishment of schools, local governments and communities may also have been sources of information regarding where schools should be set up and what needed to be taught. However, once some initial decisions on school location had been made, these external sources of information were replaced by internal sources -- i.e., schoolmasters and supervisors.

The existing separation between information-gatherers and final users of services inevitably leads to knowledge gaps. For example, population shifts can result in some local areas having a higher or lower demand than that originally envisioned. In Latin America, a different problem has surfaced. Education officials make assumptions about the internal efficiency of the system through the computation of school reports on drop-out and repetition rates. What the officials

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[80] Douglas M. Windham, "The role of basic education in promoting aggregate effects and marginalized populations," *in* Herbert Walberg and David W. Chapman (eds.), *International Perspectives in Educational Productivity* (Greenwich, Connecticut, JAI Press, 1992), pp. 91-108.

[81] Frances Kemmerer, "An integrated approach to primary education incentives", *in* David W. Chapman and Carol A. Carrier (eds.), *Improving Educational Quality* (New York, Greenwood Press, 1990), pp. 135-152.

fail to take into account is that drop-outs from one school often drop back in to other schools. Surveys of parents readily reveal a pattern of behaviour that officials have, for many decades, ignored. The policy implications are profound, as indicated in box 21 below.

Box 21
Central Statistical Units Often Overestimate Drop-outs

Studies conducted in many third-world countries have shown that the information collected from schools by ministries of education regarding student enrolment is fairly reliable. The information on student repetition, however, tends to be less reliable. Repetition rates are not accurate because many schools do not require the students to show their school certificates when they enrol at the beginning of the academic year. To record the number of repeaters, schools must rely on the teachers' recollection of who was enrolled in each grade during the previous year, or on students' own reporting. Sometimes students (especially those in lower grades) do not even know what it means to be a repeater.

Because of the weakness of the repeater data, an alternate means of determining their numbers is to use an age/grade formula that relies on standard school statistics. This method was used to design a simulation model for estimating promotion, repetition, and drop-out rates in six Central American countries. In all six countries, the model produced repetition rates that were higher than the official estimates published by the ministries of education. Correspondingly, the model produced lower drop-out rates. The reliability of this model was confirmed with a field study in Honduras which asked parents about their children's behaviour. The magnitude of error in official estimates is substantial. For example, whereas the official estimate indicated a 46 per cent drop-out rate, the simulation model and the parent survey arrived at an estimated drop-out rate of 11 per cent.

The implication of this study is that official policies, heavily directed towards reducing drop-out rates, might be better directed towards other educational issues.

Source: Ernesto Cuadra, "Indicators of student flow rates in Honduras: an assessment of an alternative methodology", *BRIDGES Research Report Series No. 6* (Cambridge, Massachussets, Harvard Institute for International Development, December 1989).

Fiscal limits. Perhaps the clearest indication of fiscal constraints has been the increasing difficulty faced by modern managers in obtaining revenues to realize their plans. In recent decades, in lieu of taxing an unwilling public, these managers have turned with increasing frequency to deficit funding, drawing on loans from commercial and international banks. While the managers have expected substantial returns from these investments, they have often been disappointed. The extent of this disappointment has been well documented. Instead of national economies taking off, they have all too frequently gone into

a tailspin, saddling Governments with heavy debt-servicing burdens that have crippled new initiatives.

Under the banner of decentralization, modern managers have more recently sought to shift a greater proportion of the financial burden to regional and local governments as well as to the direct users of public services. However, these steps have often encountered resistance. Local groups, accustomed to the former pattern of centralized subsidies, ask why they should be required to pay for something they did not create. With its lack of popular support, fiscal decentralization has often failed.

The fostering of dependence. Local communities once provided their own schools, but the modern State moved in to offer its own form of education at little or no cost. Over time, local communities came to accept this service as their natural right, and abandoned their earlier autonomous efforts to provide educational services. A situation evolved where those at the grass-roots level found themselves accepting what the centre provided rather than considering what was needed; the local community gradually lost its ability to act on its own.

Poor distribution of resources. Modern management systems seem to have greater success in distributing hard resources than in distributing soft resources. From the point of view of the central office of a modern school system, schools need a range of inputs including buildings, principals, teachers, books, supplies, etc. In principle it would seem that each of these inputs could be provided in an equally effective manner; however, among the various inputs, central offices tend to give personnel the highest priority, because these inputs are part of the educational system and have a habit of talking back. Higher priority for personnel means that other inputs are often neglected; thus, schools are more likely to have teachers than books or other instructional aids.

Inequity in distribution. The modern organization distributes resources through a hierarchical bureaucracy whose local offices are typically found in regional towns. Inputs move down from the centre through these local offices and out to the schools. The members of these local offices have a keen interest in the process of distribution, for it has a direct impact on the quality of their lives. In a context of scarcity or tardiness in the supply of inputs, local officials are likely to bias the process of distribution so that their immediate locale reaps the greatest benefits. A recent study of teacher distribution in Indonesia shows an extraordinary inequity in teacher placement (see box 22); some rural schools have only 1 teacher per 100 pupils, while some urban schools have 1 teacher for every 10 pupils.

Lack of professionalism. Supervision is presumably a critical element in the provision of inputs and their effective utilization. The modern organization tends to recruit good people for these supervisory tasks -- individuals who have

strong records as principals and teachers. However, the tasks assigned the supervisors are often poorly defined; moreover, the supervisors are not given adequate resources to accomplish these tasks. A common example is school visitation: supervisors may be assigned responsibility for between 50 and 100 schools over a wide area, but are not provided with either transportation or a travel budget. Hence, supervisors cannot get around, and find that wherever they go, they can make no more than superficial contributions in the time available.[82]

Box 22
The Sizeable Disparities in Teacher Placement by Local Educational Offices in Indonesia

Overall, Indonesia makes generous provision for staffing its primary schools: the national teacher-class ratio is 1:14.

The problems of primary-teacher provision in Indonesia are essentially problems of distribution rather than of supply. There is a plentiful supply of teachers overall, but many of them are teaching in the wrong places. "Pockets of shortage" frequently exist alongside "pockets of oversupply".

Teacher distribution is executed and hence can be analysed at four levels: from the national level to the provinces, the provinces to the regencies *(kabupaten/kotamadya)*, the regencies to the districts *(kecamatan)*, and the districts to the schools. The higher levels are mainly responsible for distribution, while decisions on transfers are generally made at the lower levels.

An inter-quartile ratio (IQR) was used to determine the equality of distribution at each of these levels. Perfect equality among units would yield an index of 1.0, with higher levels indicating greater inequality. The following are the results by level:

Distribution level	IQR	(n)
Nation to province	1.35	1
Province to regency	1.47	27
Regency to district	1.63	256
District to school	2.76	36

It is clear that processes at the central levels tend to distribute teachers more evenly than processes at the more local levels. In the 36 districts for which data were available, the most favoured quarter of pupils have, on average, about 2 3/4 times as many teachers as the least favoured quarter.

Source: Dean Nielsen and H.C.A. Somerset, "Primary teachers in Indonesia: supply, distribution, and professional development" (mimeo), (December 1992).

[82] For a thoughtful report on problems in supervision in remote rural areas, see Raymond F. Lyons (ed.), *Problems of Educational Administration in Remote Rural Areas: Report of an Expert Meeting in Kathmandu* (Nepal, UNESCO International Institute for Educational Planning, 1980).

Overload at the local level. The school is but one outpost of the modern State. Distinct from the school system (covered mainly by the ministry of education), the State manages a number of other services that have local implications, some virtually duplicating the mission of the school. Among these are local centres for adult education that teach literacy and skills, local health and family planning centres, and local youth programmes. In some settings, the diversity of local programmes causes confusion. For example, at one point in Indonesia there were four competing programmes to teach job skills and crafts to rural people. This overlap in the outputs of the modern State reflects a lack of integration and a high degree of competitiveness to create programmes and command budgets at the centre. The consequences at the local level (which may not have been consulted in the planning of these programmes) include confusion and overload.

These limitations are more extreme in some settings than in others. The fiscal difficulties are very evident in the poorer countries. In some of the more developed countries such as the United States, the fiscal difficulties are more localized, leading to regional disparities. The modern system was introduced later in Asia than in other regions, and is still functioning reasonably well, though even here, major difficulties are now being encountered in the attempts being made to respond to the new challenges of urbanization and technical change.

II. Reforming Modern Management

The limitations of modern management have long been recognized, and the standard approach has been to propose improvements. A first step towards identifying weaknesses in management systems is a careful situation analysis -- sometimes referred to by other donors as a "sector assessment".

Insights from Sector Assessments

A Liberian sector assessment provides a typical example:

> *The assessment begins by asserting that "school enrollments in Liberia are dropping, due to a series of economic, fiscal and managerial problems being encountered in the education sector". Specifically, the assessment observes there is "a lack of management capacity at both the school and Ministry level. This is manifest in the lack of data for planning and management of primary education, the lack of communication between schools and the Ministry, and in [the] poor utilization of donor funding and lack of donor coordination". The lack of management capacity is said to be "manifest in the lack of effective supervision of the*

schools and by the lack of information to support resource allocation, planning and program implementation decisions." The assessment concludes with recommendations for centralizing management, improving the management information system, and management training.[83]

Diagnoses of this kind have provided the background for management reforms in various countries. Table 27 provides a thumbnail summary of 14 management reforms that have been initiated over the past two decades in a variety of national settings. The following sections will provide a more detailed look at several examples.

Table 27. Recent Instances of Management Reforms

Bangladesh, 1980s **Supervisors** **Lockheed and Verspoor, 1990**
A group of Upazilla Education Officers were appointed to intensify supervision through both scheduled training sessions and surprise visits. Teacher absenteeism was significantly reduced.

Colombia, mid-1970s ***Escuela Nueva*** **Rojas and Castillo, 1975**
The Government developed a new multi-grade approach to basic education called *Escuela Nueva* which involved strong participation. A parents' committee worked with the student council on joint projects to improve the school and curriculum. *Escuela Nueva* has led to significant increases in access, educational quality, and student self-esteem.

Costa Rica, mid-1970s **Nuclearization** **Olivera, 1983**
To improve the dismal state of rural schools, networks of five schools were linked in "nuclei" to share a library, teaching aides, workshops, and certain administrative services. Nuclearization helped to empower and motivate teachers, and resulted in a curriculum more relevant to local needs.

India, 1980s **Multi-level Planning** **Mathus, 1983**
With the sixth Five-Year Development Plan (1981-1986), India shifted major responsibilities for the planning and implementation of educational programmes to the district level. The shortage of personnel and the separation of educational planning from that of other sectors have prevented the full benefits of this shift from being realized.

Madagascar, late 1970s **Regional Offices** **Razafindrakoto, 1979**
The 1975 Constitution recognized communities as the basic units of Government. Each community was expected to build a primary school and develop syllabi responsive to local needs. With the central government subsidies for school construction, significant increases in primary school enrolments were achieved.

Malaysia, 1980s **Training** **Lockheed and Verspoor, 1990**
The National Institute of Educational Management was established to improve the planning and management capabilities of school managers. The Institute

[83] "Liberian education and human resources sector assessment, 1988", in: David Chapman, *Facilitator Manual: Formulating Conclusions and Recommendations* (New York, UNICEF, 1992).

Table 27. *(continued)*

was able to develop an inexpensive and popular set of courses that attracted far more applicants than originally anticipated.

Mexico, 1980s **Decentralization** **McGinn and Street, 1986**
An official programme to transfer control of funds to the State level was found to have little impact on the actual operation of schools. The reform was introduced to strengthen the power of the new Government *vis-à-vis* State educational officers, as a way to circumvent the entrenched bureaucracy.

Nigeria, 1980s **Community Schools** **Okeye, 1986**
Facing a rising demand for secondary education and declining revenues, the State acceded to community requests to build their own schools. The communities were able to build the schools at low cost through voluntary labour and donated materials. The outcome was a rapid but geographically uneven expansion of secondary education.

Papua New Guinea, late 1970s **Clusters** **Bray, 1987**
The primary responsibility for the planning and construction of schools was shifted to the provincial level. Given significant variations in regional resources, this has heightened regional inequalities in both access to education and quality.

Peru, 1970s **Micro-planning** **Ruiz-Duran, 1983**
In 1972 Peru was divided into Community Education Nuclei (25 schools per nucleus), where important planning and administrative decisions were to be made. However, the lack of power, funds, and appropriate training for staff prevented them from taking on new responsibilities.

Sri Lanka, 1980s **Reorganization of Clusters** **Bray, 1987**
Clusters of between 10 and 15 schools were established and cluster principals were appointed to coordinate resource sharing, joint training, and intramural activities. The change improved student achievement in the weaker schools.

Swaziland, 1980s **Training** **UNESCO, 1987**
To improve the performance of a recently privatized system, a programme of headmaster training was established to improve school-based skills in financial and resource management, curriculum development, and evaluation.

Tanzania, 1970s **Integrated Planning** **Mapuri, 1983**
Integrated planning for all sectors, including education, incorporated inputs from a decentralized administrative structure into local village councils. To help carry out their plans, village councils were given power to raise revenues and recruit personnel. The reform had a positive impact on school enrolments, but suffered from a shortage of capable personnel and administrative ambiguities.

Thailand, 1980s **Training, EMIS** **Wheeler and others, 1989**
A selected group of "effective" principals developed an in-service training course for their peers which involved modules, videos, slides and practical exercises. This course was administered at the district level to all school principals. Principals who failed a post-training test had to repeat it until they were successful. Principals were later monitored to see if they practised the course objectives.

Source: William K. Cummings (ed.), *Reaching Peripheral Groups: Community, Language and Teachers in the Context of Development*, *Special Studies in Comparative Education*, No. 31 (New York, State University of New York at Buffalo).

Management Information Systems (MIS)

One of the most consistent themes in modern management reform is the improvement of the quality of information available to managers. Knowledge gaps, it is argued, lie behind many of the failures of modern education.

> *It is only by using resources (both financial and human) more efficiently that educational systems can provide greater opportunities for learning. The only way to evaluate a system's efficiency is by establishing "objectively verifiable indicators" or benchmarks. Objectively verifiable indicators are quantitative measures that indicate the nature of change, its direction, and its extent. A simple example of benchmark data is female enrollment statistics.*[84]

Existing information systems collect information on the inputs to schools, but fail to consider what schools do with these inputs. Thus, MIS reformers propose that the collection of new information focus on process and outputs. An expert group has proposed a three-phase schema for improving management information systems, and has pioneered the reforming of these systems in a number of countries. The key indicators of the MIS they recommend are identified in table 28.

Accountability

It would be a great mistake to ignore the challenges involved in improving the quality of information available to managers. There have been many attempts but remarkably few successes, and invariably these successes require far more time and effort than was originally envisioned. Under the sponsorship of the United States Agency for International Development (USAID), a group has been working in Egypt for over 10 years and has only recently begun to see encouraging examples of information-based decisions. Even so, the quality of the information collected is still suspect, and the turn-around time from local collection to utilization at the local level is nearly a year, central utilization typically begins a year and a half after collection.[85]

The above notwithstanding, in some systems considerable strides have been made in developing information that is both comprehensive and reliable. Thailand provides an interesting example. Compared with most developing societies, Thailand has a large cadre of highly educated and research-oriented officials who

[84] Douglas M. Windham, "Indicators of educational efficiency," *Forum for Advancing Basic Education and Literacy* (September 1991), pp. 3-4.

[85] Thomas Cassidy, Harvard University, Graduate School of Education, Ph.D. thesis, 1990.

Table 28. Seven Indicators of Efficiency: Benchmark Data for Three Phases of Development

Efficiency indicators	Phase I	Phase II (phase I data plus the following)	Phase III (phase I and II data plus the following)
1 Student characteristics	• Enrolment by school • Gender ratios • Progression rates (aggregate only)	• Gender data cross-tabulated with size-of-place and region • Ethnic distribution • Detail by level and type of programme • Separate repetition and attrition rates • Age distribution	• Subject or course specialization • Attitudinal and behavioural measures • Time use
2 Teacher and administrator characteristics	• Distribution by qualifications • Student-teacher ratios	• Qualifications distribution including specializations • Age and experience • Distribution by location • Students per administrator • Turnover rates and incidence • Absenteeism	• Time use • Training needs • Interaction with community • Job satisfaction
3 Curriculum and educational materials	• Textbook availability • Regional and size-of-place distribution	• Textbook availability and use • Availability of support materials • Status of curriculum development and dissemination	• Knowledge of curriculum by administrators and teachers • Users' evaluations of curriculum and materials • Evaluation of alternative instructional technologies
4 Facilities and equipment	• Number of "complete" schools • Students per school • Students per class	• Facilities use by level and type of programme • Equipment availability • Distribution of special-use facilities	• Equipment use • Needs analysis • Maintenance and replacement projections

Table 28. ***(continued)***

Efficiency indicators	Phase I	Phase II (phase I data plus the following)	Phase III (phase I and II data plus the following)
5. Student achievement	• National examination pass rates • Promotion rates	• Examination scores and pass rates cross-tabulated with student and school characteristics • Attainment distributions by student and school characteristics • Promotion rates by student and school characteristics	• Determinants of educational outputs • Determinants of inequalities • Analysis of high- and low-achieving schools
6. Education and training outcomes	• No data	• Earnings from public employment • Employment (aggregate) by level of education • Tracer studies of secondary school and higher education graduates	• Net present value estimates by level and type of education • Studies of graduate attitudes and behaviours • Job search rates by level and type of graduate
7. Costs	• Teacher salaries by qualifications • Aggregate budget data • Cost per student by level of education	• Ingredients-approach cost calculated for each level and type of programme • Unit and cycle cost for all programmes	• Detailed cost analysis of major programmes and alternative technologies • Cost projections by level and type of education

Source: Douglas M. Windham, "Indicators of educational efficiency," *Forum for Advancing Basic Education and Literacy* (September 1991), p. 3.

have been experimenting with MIS innovations for nearly two decades. Moreover, the computer culture has caught on in the broader society, so there are a number of young staff members who feel comfortable with the new information technologies.

Concern for the quality of basic education led Jordan's National Centre for Education Research and Development (NCERD) to develop and administer a nationwide test on the achievement of fourth graders. The following box illustrates how the results of this test were used to induce improved performance at the school level.

Box 23
Assessment of Learning Achievement of Grade Four Students in Jordan

Aware of the importance of monitoring the quality of education, UNICEF and UNESCO launched an initiative to encourage several countries to develop national systems for the monitoring and assessment of learning achievement. Jordan is one of five countries that participated from the beginning, monitoring and assessing the achievement of fourth grade pupils in order to evaluate learning achievement with respect to the Education for All goals.

Achieving the goals of Education for All requires the fulfilment of two basic conditions:

- The provision of essential educational facilities for all.
- Effective mechanisms to ensure basic educational skills.

For the collection and evaluation of information related to the expansion and reach of the educational system, the National Centre for Education Research and Development (NCERD), in cooperation with the Ministry of Education, maintains a comprehensive educational database and an Educational Management Information System (EMIS).

The main focus of this monitoring evaluation is the measurement of achievement levels among primary-level students, with the fourth grade targeted in this particular analysis. The study focuses on both direct (short-term) and indirect (long-term) objectives.

The direct objectives include the following:

- Measuring learning achievement in the Arabic language, mathematics, science and life skills.
- Studying the family backgrounds of the students.
- Studying the instructional practices of the teachers.
- Studying school characteristics.
- Studying students' attitudes.

The indirect objectives include the following:

- Building up the national capacity for monitoring educational progress.
- Institutionalizing the evaluation function by establishing a mechanism for monitoring learning achievement at regular intervals.
- Establishing a channel of communication and promoting dialogue between the parties responsible for evaluation research and educational planning.
- Establishing an Educational Management Information System (EMIS).

After considering the statistical, financial and practical aspects, it was decided that a random sample of 245 schools would be adequate for the monitoring exercise. The schools selected were examined to ensure that they adequately represented a broad range with respect to the following areas of interest: school size, location, gender (whether male, female or co-educational), and governorate.

Learning achievement in Jordan had to be measured within the context of the ongoing Education Reform Plan (ERP), which is aimed at raising the quality of basic education. The achievement tests were thus designed, *inter alia*, to establish current achievement levels among students, with the results serving as the base-line data against which future progress could be measured. Other purposes included comparing the achievements of different groups of students, and studying regional, locational and gender differences in student achievement.

Results

Arabic. An Arabic language test was administered to 4,908 fourth grade students in 205 schools representing all of the educational authorities and governorates in Jordan. The average test score was 54.19 (out of a possible score of 100). The total scores of the upper 10 per cent of students ranged from 84 to 100, i.e., from 91 to 100 in reading, from 85.4 to 100 in dictation, and from 82.3 to 100 in grammar.

Results showed that students in the Amman Governorate outperformed the students of other governorates, with Kerak scoring lowest. Results also indicated that the performance of female students was higher than that of male students, with total female scores averaging 57 per cent against 51 per cent for males.

Science. A science test was given to 2,412 fourth grade students in 205 schools. The total scores averaged about 42 per cent. The performance of the top 10 per cent of students ranged from 60 to 100 per cent. There were some in the bottom 10 per cent who failed to answer any of the test items correctly. Again, the total scores of the female students were significantly higher than those of the males, with females scoring an average of 43 per cent, against 40 per cent for male students.

Mathematics. This test was administered to 2,428 students in 205 schools. The national average on the test was 30 per cent, reflecting a low overall performance. The results of male and female students did not show a significant difference.

Life skills. This test was given to 4,776 fourth grade students in 205 schools. Results indicated that the national average score was 61.2 per cent. The test included questions relating to health and nutrition, environment, daily behaviour and civic education. Results show that the Amman Governorate student performance was much higher than that of students in the other governorates.

Source: Joint UNICEF-NCERD-UNESCO Regional Seminar on Monitoring Learning Achievement, held in Amman from 23 to 26 July 1994 (final report).

Supervision

In many educational systems it is difficult to collect and evaluate information on school performance, at least on a nationwide basis. Different languages may be spoken in the various regions, or the infrastructure needed for the rapid communication of information may not be in place.

Improving the quality of supervision. Supervisory systems are an alternative means of obtaining information about school performance and encouraging improvements. As noted in table 28 above, many reform efforts have focused on improving the quality of supervision. The following are some principles that can be followed in reforming supervision:

- **Changing the span of control.** Major obstacles affecting the quality of supervision include the heavy load assigned supervisors and the physical difficulties that stand in the way of their reaching schools. This situation can sometimes be relieved by alterations in the chain of command. For example, until recently, supervisors (known as circuit officers) in Sri Lanka were directly responsible to provincial offices. Beneath a provincial office were about 10 circuit officers, and these officers assumed responsibility for 50 to 80 schools. A recent reform decentralized the provincial offices by transferring many of their functions to more localized divisional offices. The division offices, staffed with up to three supervisors, in turn related to cluster principals (see below). The reform added a level to the organizational hierarchy but reduced the number of units (the span of control) for each level to an average of 10

units 10 clusters per division, and up to 10 divisions per provincial office. This arrangement significantly improved communication.

- **Strengthening horizontal linkages.** Supervisors are put in place primarily to maintain vertical linkages. However, many of the best insights about how to run schools or teach classes lie in the schools themselves rather than in a central or provincial office. Some schools do much better than others because they are rich in these insights. Another strategy of management reform is to open up horizontal linkages so that the more effective schools have an opportunity to share their wisdom (and other resources) with neighbouring schools. The above-mentioned cluster is a useful mechanism for encouraging these vertical linkages.

- **Training principals to exercise greater initiative.** Another reform often advocated to improve the modern system is to provide principals with special management courses which aim at helping them learn leadership skills and techniques for improving the quality and efficiency of school management. Malaysia, for example, has developed an extensive nationwide programme which is generally regarded as having a major impact.[*]

  These training programmes are not guaranteed to have the desired impact unless they are accompanied by other changes which actually empower principals, altering their status from that of last-line implementers of central decisions to that of first-line innovators of a flexible and responsive system. In the absence of empowering reforms, principals may consider the lessons hollow, since they are at the bottom of a large hierarchy and everything they initiate is ultimately subject to review: if they do well, they will be ignored; if they do badly, they will be sacked!

- **Some principles of modern management reform.** Experience with the reform of modern management suggests several lessons:

  (a) The "centre" is, in reality, many centres that may formulate policies independent of each other.

[*] Ibrahim Bajunid.

(b) A bureaucracy's potential for assisting schools may exist in inverse relation to the schools' need for that assistance.

(c) Reforms that require joint action are more likely to encounter difficulties.

(d) Reform implementation may be thwarted by a personnel policy that encourages the frequent rotation of key personnel.

(e) Reforms should be thought of as a creative process to be continually monitored and reshaped.

(f) It may be difficult for principals to accomplish all of the changes in the reform(s).

(g) Different contexts may require different reforms.

(h) Schools have considerable potential for stimulating community involvement.

(i) It is important to appreciate the diverse communities associated with schools

Perhaps the most important conclusion is that management reform from above tends to gloss over the gross disparities in local conditions and the capabilities of local schools and communities. It fails to involve communities, and hence does not succeed in capturing the energy available there. In this next section, a new approach to educational management that overcomes this weakness will be introduced

III. Strengthening the Periphery

The modern management approach has simply viewed schools as an outpost of the modern acculturation endeavor, with principals as line subordinates of higher levels in the modern educational bureaucracy, and with teachers below the principals. Parents have been assigned the duty of bringing their children to school and leaving them at the gate. In many modern systems, parents are penalized for their failure to comply

There are a range of variations possible within the modern approach. One slight modification involves the expansion of the parents' role through the formation of parent-teacher associations (PTAs) which allow parents to be informed witnesses of the educational process. A second possibility is the designation of certain parents as trustees with some level of authority over school processes

An even more radical approach involves designating the community as the central vehicle for local improvement, and entrusting all authority for education to the local level. With this approach, the centre becomes a subordinate partner in education, offering support to local leaders in exchange for cooperation in promoting a limited range of central objectives such as the implementation of a central curriculum or other central programmes in areas such as immunization, public health and vocational skills. In the subsections below, some of the implications of this approach are explored. The centre becomes an advocate and consultant for education rather than an autocrat. Education thus evolves in correspondence with the imperatives of local or communal values and needs.

New Approaches for the Schools

Community values/needs as the base. The starting point for the periphery approach is the natural communities where people reside and develop mutually supportive networks. These communities become the foci for thinking about educational goals and school location.

The Community Schools Intiative in Egypt, described in the box below, is a good illustration of a focus on people in their community settings.

Box 24
A Review of Egypt's Community Schools

Almost 30 per cent of the population in Upper Egypt live in hamlets cut off from the direct services of larger towns. Many have no electricity, and schools and health services are a long walk away. Over half of the boys in these areas walk to the nearest government primary school (at least five kilometres away), while most of the girls do not attend. In 1992 UNICEF began to look for ways of helping the Government reach out to the rural areas of Upper Egypt with a quality basic education programme focusing on girls.

During 1991/1992 a UNICEF team of women trained as community health facilitators, working to gather information on the use of UNICEF-installed water systems and latrines, established that there was a strong local desire for education -- even for girls -- provided that it could be given within the community itself. Community leaders indicated that they would be able to provide classroom space -- a room connected to a mosque, a community centre or a renovated house, for example -- and/or community self-help to build a classroom on land donated for that purpose. Through discussions with local leaders, families, women and children, a strategy began to develop.

The initial objective of the Community Schools Initiative was to develop a sustainable model for providing quality basic education to boys and girls in the rural communities of Upper Egypt. The project formally

began with the signing of a Memorandum of Understanding between UNICEF and the Ministry of Education in April 1992. UNICEF agreed to organize and finance the consultants and technical staff, training, supplementary materials for teachers and children, school furnishings and equipment, and an evaluation of the community school model. The Ministry would pay the teachers, provide guidance on curriculum matters, provide instructional materials, and participate in training and supervision.

Four community schools were opened in October 1992. Preparations had been carried out by the communities, and project participants included the Ministry of Education, the District Council, UNICEF, and local NGOs. As the project grew mainly out of the UNICEF community health education programme, a priority consideration was to incorporate health, nutrition, and first-aid concepts into the instructional programme, and to ensure that pupils' health needs were met.

The first community schools generated a great deal of enthusiasm and received considerable attention from the local leadership (including the Governor), the communities, and the Ministry of Education. The expansion to 25 sites was driven by demand.

A central claim of the programme is that the community schools constitute an affordable, sustainable approach to providing quality basic education. Although the costs for instructional materials, training and supervision are higher than in regular schools, there are no central costs for land, school buildings or maintenance. It was realized at the outset that the development costs would require a higher level of recurrent and capital expenditure per pupil than would be the case after expansion. At current exchange rates, the annualized per-class cost for community schools is approximately US$ 4,000, and the per-pupil cost is estimated at US$ 120 per year. As the programme develops and expands, per-pupil expenditures for support staff and facilitators will decline, so that the estimated per-pupil cost will eventually fall to approximately US$ 90.

Attendance rates are very high -- generally 95 to 100 per cent -- although there are religious holidays or calls for work which have caused higher absence rates. The facilitators and supervisors have worked with the school committees to alter school schedules and provide free days to accommodate these real pressures.

There are two sources of information on the pupils' achievement in the community schools: internal assessments and internal tests, prepared and marked under the supervision of staff from the National Centre for Educational Examinations and Evaluation (NCEEE). These two sources indicate that the pupils in the community schools have performed well: results show that every student in the community school programme has satisfactorily completed Grade 1. External evaluators have made the following observations:

- The class facilitators and supervisors exhibit outstanding motivation, as well as an interest in and dedication to their work.

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- The instructional design used by facilitators is well understood and implemented.

The support and participation of the community and parents in school activities is unique.

Although the principal initial objective for the programme, as mentioned before, is to provide quality basic education in the rural areas of Upper Egypt, it also seeks to have a positive influence on the process of community development. So far, community leadership in developmental activities is growing. Communities are also taking pride in these schools, contributing land, labour and skills, and also ensuring that children attend. Having realized its potential, policy makers at different levels of Government are seeking ways to implement the programme on a larger scale. The Ministry of Education has announced plans to establish 3,000 schools to serve small rural communities -- particularly to reach girls who are presently not enrolled in school.

The programme has clearly made significant gains in developing a viable approach to multi-age and multi-grade quality instruction. Yet the work should continue to be viewed as experimental, and should evolve based on ongoing monitoring and reflection.

Source: UNICEF, a case-study of the Community Schools Initiative (Cairo, 1994).

Education as the backbone of local development. Local communities are often flooded with requests to emphasize various development initiatives such as small-scale irrigation, family planning, immunization or skills programmes. School leaders, looking at this plethora of initiatives, can turn their backs, standing firm in their narrow purpose of using the school to promote academic learning, but this would be a mistake. Other local leaders may be more open to some of these other programmes, and may decide to promote one or the other of them. All of the programmes may be good for the local people. In practical terms, however, the local government apparatus is not strong enough to handle them all, to the extent that the local government seizes on one programme (such as family planning), it is likely to slight others.

The wise educator needs to place education at the centre of local community activities rather than risking the prospect of neglect as other initiatives capture the imagination of local leaders. Education can plausibly be promoted as the foundation of local development, inasmuch as schools are open and prepared to incorporate other development activities such as health clinics, birth control seminars, experimental farming plots and skills training into the school's overall programme. Each new activity should be viewed as enhancing the school's

vitality and usefulness as a knowledge centre and development agency, not as something that detracts from the school's partial objective of fostering academic learning.

Communities are the foundation of effective education. Perhaps the most consistent finding from several decades of research on school achievement is that the out-of-school effects (that is, the effects of family and community) are far more powerful than the in-school effects. This consistent finding underlines the strategic good sense in basing a strategy for effective education on the values and needs of the community, rather than on those of the central educational authorities.

While it is important to understand the great power of the community over education, it would be a mistake to think that this power is inexorable or unmanageable. Good school management involves building a strong relationship with the community -- one that should be dynamic and reciprocal. Schools have much to offer communities: for example, schools can mobilize children to offer help in community projects such as canal repair, cleaning public and religious buildings, and providing services such as music or labour during community festivities. Schools can also reach out to communities by visiting the homes of children who are experiencing academic difficulties or are frequently absent in order to discuss new approaches.

To the extent the schools help communities, the communities will reciprocate -- possibly with financial support, voluntary labour to improve school buildings and grounds, or even with the provision of specialized support (i.e., teachers of certain skills or tutors).

All of the success stories in basic education for the periphery -- such as *Escuela Nueva*, ZINTECH, IMPACT and PAMONG -- involve close and dynamic relationships between schools and communities.[*]

The diversity of communities. Communities differ widely in terms of religious commitments, principal economic activities, size, dispersion, and degree of integration. The modern approach tends to minimize these differences, proposing a standard packet of educational inputs for all communities; when a community is large, it may receive several of these packets.

The periphery approach starts building on the community's own understanding of its values and needs. Some communities may wish schools to place strong emphasis on religious education, and others may not. Some may require a single school in a central location, while others may wish to devise a different

[*] Sheldon Shaeffer, "Educational quality redefined," *Forum for Advancing Basic Education and Literacy*, 1 (3) (January 1992).

approach to reach a highly dispersed population. By placing educational decisions in the hands of communities, it becomes more feasible to devise solutions appropriate to the local context.

Developing a local plan. Starting at the community level leads to new questions about the ideal school structure to fit local conditions. For many tightly knit communities that reside in remote areas, the standard multi-class school building may be the answer. In these settings, it is always advisable to come to some agreement about the maximum size for such a facility. If the number of school-age children exceeds 200 or 300, it may be advisable to build new schools.

In other settings where the population is more dispersed, it may be asking too much to rely on a single school. Numerous, widely dispersed small schools set up close to the actual settlements may work better. These small schools can be fortified with distance learning technology -- interactive radio or even television -- to enhance the quality of instruction in core academic subjects such as arithmetic and language.

Whatever the approach chosen, it should be locally designed to reflect local circumstances. Moreover, to strengthen the effectiveness of each school, it would be helpful if local leaders were to arrange events to maximize interaction between the respective educational units. These events might range from periodic meetings of teachers to local athletic or cultural events that would enable children from the various school sites to meet each other. Ideally, these events would be arranged in such a way as to strengthen community solidarity, rather than to foster divisive competitiveness.

Community-based education requires community-based resources. The rapid expansion of modern schools has been achieved because the centre has dropped its educational packets on localities. Prior to this central intervention, many localities had their own means of providing an education (though this was often limited in content or scope); however, the central intervention often led to an abandonment of local initiative. Communities became dependent on the central solution, even though they often questioned the value of much of its content.

If the community is going to resume command of education, it will have to reassume at least partial responsibility for supplying schools with the needed resources. There is considerable debate about the prospects for the local financing of education, particularly at the basic level, the balance of expert opinion is sceptical. Yet in the developing world there are many instances of local financing on a large scale, particularly where schools place significant stress on values education. For example, Indonesia has a large system of religious schools parallel to the State-supported secular schools -- so do India, Pakistan, Egypt,

many countries in Latin America, and most of the Francophone African countries. Local communities are prepared to support education if it promotes their values.

The periphery approach does not assume that basic education should be exclusively based on local funding, but it does advocate the local leaders' responsibility for establishing the financial framework for schools, based on locally designed plans. A major proportion of the actual financing may come from outside -- from the centre, which seeks to enter into partnership with the local authorities. However, the local level should be in charge.

This proposal is not advanced simply as a pious platitude. One of the clearest findings from the recent harvest of research on effective schools is that effectiveness is associated with school-based discretion over the use of educational resources. Those closest to the educational process are able to respond. Schools will not get discretion over funds unless some of the funds have been raised directly by the schools themselves.

Low-demand communities. It is clear that most schools are fortunate to have parents who agree with the school's externally derived agenda of teaching academic subjects, so the school does not have to exert any special effort to reach the parents. In some areas, however, parents may look sceptically on schools. In chapter five, these are referred to as areas of low demand.

The initiatives suggested above are unlikely to lead to much improvement in these communities, at least in the short run. On the other hand, as the leaders of these communities hear more about the value of education in nearby communities, they are likely to shift their priorities and begin to place greater emphasis on education. It is fair to say that it is difficult to find a single community in today's developing world where there is not at least a small cadre who believe in the value of education.

In any case, the periphery approach does not depend solely on local initiative. In the next subsection, a new approach is outlined for those in regional and national Governments that will increase the likelihood of education reaching the low-demand areas. Partnership is the working principle in these external initiatives, in contrast to the former command principle of the modernizing approach.

Reforming the Centre

The periphery approach seeks to enhance the role of the periphery in designing and carrying out educational programmes. The major reason for proposing this shift is that the prevailing modern approach seems to have reached its limit. However, there may be other compelling reasons. The authority of

central Governments has often been challenged in recent years, and the centres may thus find it in their own best interest to buy goodwill by shifting more authority to lower levels. It appears as well that new trends in information are providing communities and their local governments with greater potential for assuming a major role in public policy-making.

A new philosophy for the centre. The starting point for the periphery approach is a fundamental reordering of centre thinking. The centre once assumed a paternalistic attitude that it was the generator of essential values and insight; in the new approach it needs to accept the principle that local communities have a better understanding of many issues, and should be deferred to particularly in areas relating to the socialization of young people. The new goal of the centre should be to support local actors, attempting in the process to achieve certain goals that the centre especially values such as the spread of a uniform national culture, the realization of equity, and the development of a sufficient amount of highly developed talent to promote national competitiveness and security. In sum, the centre shifts from a focus on control to one of support.

The centre needs to identify its comparative advantage. In the modern stage, the centre has assumed responsibility for delivering a uniform and comprehensive package of educational inputs to schools across the nation. With respect to some inputs, the centre has been quite successful, often in curriculum design and school construction. Yet it has done a slipshod job in other areas -- typically in the delivery of textbooks and instructional materials. With respect to personnel, the centre's record has generally been mixed.

As the centre adopts the new philosophy, it needs to decide which of these functions is/are essential for accomplishing its ends, and also to decide which is/are practical. One recent study, arguing that the best decisions are informed decisions, proposed a division of authority between central and local actors (see box 25).

It is questionable whether the centre could achieve the impact it desires by simply restricting its activities to school construction. Most central Governments would at least seek to have a major hand in curriculum design, since the curriculum is a major vehicle for influencing the values of citizens, what is taught has an obvious impact on what is learned.

In view of the concern of the periphery approach for local values, it would be a mistake to allow the centre to have exclusive control over curriculum design. Far preferable would be a shared approach, with the curriculum incorporating a combination of both national and local components (see chapter five).

Box 25
When Is Centralization Excessive?

Most countries have relatively centralized education systems. A ranking of 100 national Governments with respect to degree of regulation, on a scale in which 1 was equal to total local control and 7 was equal to total national control, produced an overall average of 5.46 for primary education (Ramirez and Rubinson, 1979).

These patterns of centralized governance are the product of a long process marked by considerable conflict. Whether centralization is excessive depends on the perspective of the group affected. The centralization of education benefits some groups, while decentralization benefits others.

From a strictly technical perspective, it can be argued that some aspects of governance should be centralized, while others should be decentralized. *The most effective system of governance is one that gives those persons with the most information about the particular situation requiring a decision the authority to decide how best to achieve the objectives set at a higher level.*

- Teachers are the people who have the most information about the students' progress in learning; they should have the authority to decide which methods to use, and to determine the pace and sequence of the lessons.
- Principals are the people with the most information about conditions within the school as a whole; they should have the authority to decide about matters which affect the whole school.
- Teachers know more about teaching and curriculum, but parents know more about the local values and economic requirements of the community.
- District supervisors or education officers know the most about the overall problems of the district and the resources available for distribution, but school principals have more information about the kind of teachers required in their particular school.
- The central ministry may have more information about the overall requirements for school construction, but district officers will know better where new buildings should be located.

From this perspective, centralization is excessive when decisions are located too far from the source of information. Decentralization, on the other hand, is excessive when decision makers do not have information about the effects of their actions on others. (See McGinn [1990, 1992] and Winkler [1988] for more information.)

Source: Noel F. McGinn and Allison M. Borden, *Better Education for All: A BRIDGES Manual for Managers and Policy Makers* (monograph), (Cambridge, Massachusetts, Harvard Institute for International Development, September 1992).

The centre may also wish to retain selected training functions as a means of reinforcing its values. As Thomas Peters and Robert Waterman observe, large and highly decentralized firms such as IBM achieve a high level of common purpose through frequent meetings and training sessions organized by the centre.[55] These meetings enable the centre to convey its core values to personnel in charge of regional and other offices.

In other areas, the comparative advantage is not so clear. For example, who should employ teachers? Teachers are often the most expensive component of the educational process, and local communities would have difficulty in shouldering this burden. On the other hand, when the centre hires teachers as part of a national educational service, the teachers often enjoy transfer rights that enable them to move out of peripheral teaching assignments. The national approach thus tends to weaken teacher commitment to local communities.

Similarly, who should print texts? Most local communities lack the skills to write texts and/or the technology to print them. While the centre has these resources, the texts that result often employ images and language that do not fit local circumstances.

Strengthening regional offices. Particularly where nations are very large, one reform which may make some of these answers easier to find is shifting the locus of many central decisions to regional governments. For example, in Indonesia the total population is approaching 200 million, spread over a vast and diverse archipelago. The Government periodically gives serious attention to dividing the nation into several regions, each with a distinctive and relatively autonomous administrative structure. A reform of this kind was actually carried out in Sri Lanka, resulting in the establishment of 10 regional governments, each with primary responsibility for basic education. This reform has brought "central" decision-making much closer to the schools.

Interministerial consolidation. In recent years, one of the centre's greatest problems in promoting education has been that it has spoken with many tongues. In this field, the ministry of education is always the chief actor, however, even within the ministry there are often several bureaus with considerable autonomy, and sometimes these bureaus promote policies which conflict.

It is also not uncommon to find several other ministries which either have large educational portfolios or which, for other reasons, seem to undercut the efforts of the education ministry. In Indonesia, for example, several ministries have substantial programmes that have an impact on rural villages; these include the Ministry of Agriculture, the Ministry of Labour, the Office of Manpower, the

[55] Thomas J. Peters and Robert H. Waterman, *In Search of Excellence* (New York, Warner Books, Inc. 1982).

Ministry of Health, the Family Planning Agency, and the Ministry of Technology. The many and competing arrangements proposed by these diverse ministries sometimes overload the capacity of local areas.

Thailand faced a similar problem before 1980, at which point it took steps to consolidate several of the central ministries. The result was a more decisive central programme in the field of education (and in other sectors). A number of other nations have taken modest steps towards consolidation in recent years, joining several smaller ministries into a common ministry for human resources.

Often, of course, it is unreasonable to hope for major reforms in the entrenched central ministries. A different strategy is through finance. Frequently, the standard approach is to let each ministry develop and manage its own budget -- including those funds intended for local government. An alternative approach would be to develop a comprehensive budget incorporating all of the central initiatives, and then to offer these funds to the local governments in a more consolidated manner -- for example, in the form of block grants. Ideally, the size of the grants should be determined in such a way as to provide relatively more to the financially stressed local governments.

In providing block grants, the centre might indicate that the funds are to be used for the implementation of one or more local programmes, while ultimately leaving decisions about which programmes a local government might undertake to the local government itself. Such a policy would facilitate the integration between central and local priorities.

Rethinking finance. Possibly the most essential reform for promoting the periphery approach is the reorganization of educational finance. In a well-developed periphery approach, much of the financing for schools would come from those who attended. Unfortunately, following the long period of central government monopolization of revenue collection, local traditions of revenue collection have largely been subverted. Moreover, and equally important, the resources available to peripheral locations are usually less plentiful than is the case in the more central locations. Therefore, even as local communities develop greater sophistication in revenue collection, without countervailing financial equity policies these peripheral areas will generally be at a disadvantage. New approaches to school finance need to be devised.

At the heart of these new approaches should be the philosophy that the centre has an obligation to provide partial funding for schools, for the centre seeks to achieve several of its own goals through the schools -- specifically, the promotion of national unity, equity, and human development.

It is clear that the centre should pay -- but how? The following options are proposed here as initial talking points, in the expectation that financial specialists will be able to devise more refined alternatives

- The basic approach should be direct block grants to local communities or schools based on a needs formula
- This formula should not be based on a simple count of pupils, but should rather have a strong element of reverse discrimination to take into account community resources, population dispersion, and geographic isolation/peripheralization
- Performance goals may be associated with the block grants, drawing on the specific objectives of the community's plan rather than on a predetermined handbook devised at the centre
- Local communities which agree to take on a fuller array of educational objectives (e g , along with basic education, additional programmes related to public health, family planning, environmental protection, and vocational skills) might be entitled to larger grants
- The execution of these grants might best be entrusted to regional governments
- While the block grants may continue to provide a major share of local school financing, built into each community's contract should be a clear commitment to the local generation of resources

Accountability. While the centre's responsibility may shift from comprehensive supply to the limited support of local initiatives, it will still be providing substantial resources to local governments The centre may thus wish to establish some mechanism for evaluating the impact of its support This is particularly likely to be the case if the centre provides local support on a specific contract basis, i e , where it outlines certain outcomes it seeks in exchange for the interventions it introduces The establishment of a nationwide evaluation system might also be useful for local governments in determining how well they are doing relative to areas with comparable characteristics While some accountability efforts may be contemplated, it is unlikely that these will or should have much of a bite They should be used as a basis for encouraging local improvements rather than for punishing shortcomings in realized projected objectives

The Necessity of an Integrated Package

When considering management initiatives, it is tempting to think of piecemeal changes such as altering some central regulations or focusing on "leadership training" at the school level Much of the recent literature on school-based

management assumes that changes from below can succeed even if the centre remains as it is. The view of the present authors is that management improvements are most likely to be realized when they are approached in a comprehensive manner, with complementary changes at all levels.

One of the best examples in the third world of a comprehensive attempt to bring about management change is Sri Lanka's recent experience. The Sri Lankan system is characterized by a small number of privileged schools of very high quality, an intermediate layer of good schools, and a very large bottom layer of community schools that are often very small and of low quality. The major objective of the reforms was to provide these small schools with more support and more dynamic leadership.

Reforms ranged from a restructuring and down-sizing of the central ministry through a strengthening of local educational offices, to new training courses for principals and new regulations enabling communities to contribute more resources to their schools. The implementation process proceeded over a period of 10 years, during which time parts of the nation were engulfed in a tragic civil war. As with most reforms, not all of the original objectives were realized; however, the evidence available suggests that the reforms resulted in a better system, particularly in the peripheral areas.

Putting the Centre Inside the Periphery

In presenting the periphery approach, the aim here is to outline a new philosophy of development that starts from the bottom -- but how does one get there? It will be impossible to move towards de-peripheralizing the periphery unless the centre gets behind the effort. The centre, if it concurs with changes along the lines suggested here, will have to take major responsibility for the "social marketing" of these changes, such a task cannot be taken lightly. There are far more failures than successes in the decentralization of education. For example, Peru's interesting effort to "nucleartze" schools failed.[9] Brazil enacted impressive legislation to decentralize educational authority and finance, but the implementation effort was soon stalled.[10]

In sum, the process of realizing the periphery approach involves the centre in a new role -- that of consultant and promoter.

[9] G. Ruiz-Duran, "Experience of educational micro-planning in Peru through nucleartization," in *Educational Administration and Multi-level Plan Implementation: Experience from Developing Countries* (IIEP Seminar Paper) (Paris: UNESCO, 1983).

[10] David Plank, "The expansion of education: a Brazilian case study," *Comparative Education Review* 31 (August 1987), pp. 361-377.

Putting Theory P into Place

1 The basic recommendation here is that the responsibilities of the different partners in education should be more clearly delineated. Governments are urged to place a limit on their responsibilities, focusing primarily on the promotion of national unity and the equitable provision of education. The Governments can, in turn, look to their partners in education to assume other responsibilities. Parents can be looked upon to provide support to the extent that they are able (though it should be clearly recognized that parents vary in their capabilities, and that other partners should be called upon to compensate for parents with limited financial and cultural capital). Schools should be looked to for strategies to promote excellence, in keeping with their local circumstances, and they should also be encouraged to develop strategies to draw resources from their local surroundings through such means as school-based industries, revenue-generating events such as music concerts or sports events, and tuition charges.

2 In the pursuit of excellence and relevance, schools should be encouraged to develop a more complex picture of their community. On the one hand, there are the parents who supply the children; on the other, there are the firms and government services which will employ the graduates of the school system. Both parties should be invited into the schooling process as supporters and decision makers. It may be possible for schools to diversify their curricula by sending students for internships in the work-places of future employers or by otherwise strengthening their relationships with the labour market.

3 To stimulate the assertiveness of schools, it is advisable to develop new programmes in management training that target both school principals and local educational officials. These new programmes would encourage principals to play a more assertive role in school management, and would also encourage local officials to allow schools more discretion.

4 The preferred model here is of a school that is guaranteed no resources from the Government except for a minimum block grant (the size of which might vary according to circumstances). The school would be expected to develop a plan of its own for the management of this grant, and would be encouraged to seek additional resources from various sources, including the Government and the community. Schools would be allowed to admit new students under some controlled programme of growth, even at the expense of enrolments at nearby schools, so long as the student chose the school voluntarily. Controlled competition would be used to stimulate excellence and responsiveness to local demand.

5 In support of this programme, it is recommended that case-studies be conducted of schools that show impressive levels of initiative in self-management and in reaching out to their communities. What inspires these schools? What

have they accomplished? What is imitable? Similarly, pilot projects in self-management might be launched both to foster new initiatives and to find out what in the current system thwarts initiative.

6. Governments might consider a strategy of supporting schools to the extent to which they demonstrate a willingness to support themselves, or alternately, if they provide descriptions of programmes worth supporting. Rather than giving automatic support to a school, the Government should require a school to provide some indication of its plans for utilizing that support. This approach would place greater pressure on schools to determine their own goals, while keeping the needs of their local communities in mind. Principals would be required to play a major role in developing the details of the school programme.

7. The central Government as a promoter of unity should recognize that it need not mobilize every vehicle possible to ensure unity, but should instead focus on those where it has a comparative advantage. The past record suggests that the Government's most effective influence is through the curriculum, and perhaps through textbooks as well. There is little evidence that the Government's vast efforts to train personnel and control them through a centralized hierarchy has had the intended effect. There is a widespread and growing sense among educational personnel that government procedures hamper rather than promote the educational process. Under these circumstances, it would be wise for the Government to consider ways to deregulate many areas of administrative procedure, first priority should be given to personnel procedures. Schools should be given greater autonomy over their own affairs, with the Government seeking to control through mechanisms of accountability.

8. The Government as a promoter of equity should reconsider the way it supports schools. Current formulas are highly uniform, with the delivery of services to schools based on the number of students enrolled, yet it is less student numbers than local circumstances that determine the difficulty of the educational task. One critical factor is geography. Schools that are located in urban areas have access to a large pool of manpower, while those in peripheral areas do not; it takes more to get a qualified person to work in the periphery. An equality-promoting policy would recognize that fact and would provide relatively more support to a peripheral school than to an urban school. At present, it is often unclear which level of Government (i.e., the central or the local level) has primary responsibility for promoting equity; neither has an exceptional record. Strategies should be reviewed, with consideration given to new approaches that rely on more extensive input by local leaders.

9. The central Government, in supporting schools, should adopt the philosophy that it is providing this support to promote its own concerns for national unity and equality, and should therefore use its own resources to pay for

these concerns. Parents and schools may respect these concerns, but should recognize that their primary educational responsibilities are different. It is for their own concerns -- promoting quality and relevance -- that parents should be asked to provide support to schools. In view of all this, the central Government should refrain from taking resources directly from schools and/or parents unless such a move is explicitly approved by the schools and parents.

10. In promoting its own concerns, the Government might adopt procedures that encourage schools to make their own choices, rather than taking a single or uniform approach. Thus, if the Government's concern is to promote unity, it might offer schools several options such as a certain number of centrally trained teachers, a certain number of centrally prepared texts, or a block grant to encourage a school-based curriculum-development effort. Similarly, if the Government proposes to fund the construction of a new school, it might consider the option of building on its own against seeking a contract from the local community or from a private contractor. Experience suggests that local construction may be both more efficient and more beneficial in stimulating community involvement.

11. Rather than thinking of central agencies as having exclusive jurisdiction over particular categories of educational inputs, it is possible and preferable to think of the different agencies as competing in efforts to provide inputs that suit school needs. Thus, both a ministry of religious affairs and a ministry of education and culture might be authorized to develop textbook series, while offering schools a choice between these two options. Similarly, the two might compete in the provision of instructional materials or examinations. Through the promotion of competition, the quality of inputs may improve.

V. Conclusion

Major changes are required if education is to reach the periphery and serve those children who are of the greatest concern to UNICEF -- the disadvantaged and the peripheralized. While big changes are required, much that is under consideration today is no more than a fine-tuning of the existing centralized bureaucracy. Several of these conventional initiatives have been reviewed here, but it is doubtful whether they will make much difference; these reforms will tend to follow the pattern of past reforms, making education better for those who already enjoy the best.

A radically new approach must be considered that puts the periphery first. The one suggested here is not a Robin Hood approach; peripheral areas cannot be improved simply through a massive infusion of central aid. Rather the periphery, in order to move forward, must rebuild its spirit and local organization, which has largely been subverted by decades of piecemeal central intrusion. If

the periphery is seriously committed to improvement, it will have to assume a major part of the responsibility for planning where it wants to go and even for financing the journey. The present authors suggest that the educational institutions should assume the central role in the resurrection of the periphery, so that the future course of development can be integrated from below rather than fractionalized from above. Identified in this chapter are many specific initiatives that might be launched; however, it is doubtful that true success in de-peripheralizing society will be possible without a comprehensive approach to change which includes reforms at all levels.

Annex

THE CONCEPTUAL HERITAGE

Educators have proceeded through several phases in the systematic planning and analysis of educational systems, and this has generated a complex and sometimes contradictory (or at least counter-intuitive) language for discussing accomplishments. It will be helpful before turning to the UNICEF approach to review some of this history. The UNICEF Education Programme Officer (EPO), in discussions with local counterparts, will undoubtedly encounter many instances where the counterpart employs a different conceptual vocabulary; knowing the background of that vocabulary may facilitate smoother communication.

Early developments. Systematic efforts to provide education on a national scale were first begun in the eighteenth century, most notably in Sweden and Prussia. At that time local governments were the primary units in national plans, and the concern of national Governments was to provide at least one school for each governmental unit. Additional schools were allowed and subsidized if enough children enrolled to justify such a move. These early efforts failed to take into account those areas outside the de facto jurisdiction of local governments -- nor did they concern themselves with those children who did not seek schooling. Central authorities prescribed a curriculum outline but provided only minimal supervision and instructional support.

Progressivism. From about the turn of the twentieth century, particularly in the United States under the leadership of the "progressive" political reformers who sought to depoliticize and rationalize public services, educational planning acquired a more systematic character. Principles of scientific administration (inspired at least in part by the engineering models of Taylorism) were applied to examine the efficiency of schools, primarily relating the actions of school personnel to efficiency in graduating students. This approach highlighted such problems as drop-outs and repetition, but still failed to address most of the other priorities noted above. Various forms of psychological and achievement tests were devised to help educational administrators in their work, but these tests had little direct impact on planning.

Socialist planning. Concurrent with Taylorism and somewhat derived from it was the development of systematic planning in the newly formed Union of Soviet Socialist Republics (USSR). Committed to mass education and faced with a vast territory and population, the socialist educators also developed a vocabulary stressing efficiency. On the one hand, they focused on issues of internal efficiency, i.e., the strategies that would enable children to complete school in a minimum amount of time, thus providing room for new cohorts of children; such strategies included automatic promotion, the use of tutors, and

instruction in local languages. On the other hand, the socialist planners were concerned with placing every graduate in a productive job -- what they referred to as external efficiency. This led to extensive studies of the relationship between education and the needs of the labour market. One practical outcome was the development of various forms of vocational and technical training for many of those youth who had completed a basic educational course. Ultimately techniques of manpower planning emerged, and external efficiency measures of the degree of fit between educational experiences and labour market needs were proposed.

Access and mobility. Refinements of these engineering models of schooling were still dominant in educational planning through the Second World War, and left a strong imprint on early UNESCO work in developing national planning capabilities throughout the world. Thus, the main concern of many of these agencies was to develop measures of internal and external efficiency.

An additional refinement, in view of the United Nations declaration that all children had a right to an education, was the development of crude measures of access, through dividing the numbers of children in school by some measure of total population (typically developed by another agency).

During the 1950s sociologists became increasingly interested in questions of access and began to investigate the relative openness of educational systems cross-nationally. They then related this educational openness to the relative openness of occupational systems, attempting to understand the extent to which education contributed to the outcome of social mobility.

These studies tended to conclude that education promoted social mobility when nations expanded their industrial sectors. However, when economies remained stagnant and primarily agricultural, educational expansion only led to educational unemployment. Refinements of the early mobility studies included the development of educational attainment models.

Returns on investment in education. As nations expanded their educational systems to provide universal access, educational budgets grew, and planners began to investigate the cost-effectiveness of these expenditures. Their efforts were accelerated by the increasing interest of economists in the relationship between education and the overall process of development. Whereas the earlier language of efficiency had generally been phrased in terms of physical ratios, by the late 1960s new financially based measures had gained prominence.

One focus of these studies was the rate of return on a nation's investment in education. The studies suggested that such rates were surprisingly high, compared with investment in the industrial infrastructure, for example. Primary education generally yielded a higher return than secondary or higher education.

A second focus involved an examination of the relative returns on different types of educational investments such as expenditures on teachers, textbooks and school buildings.

- **Educational quality.** During this period some analysts began to argue that the task of providing access to schools and even of developing relatively efficient educational processes had been accomplished. The latter evaluation was sometimes related to the convenient practice of automatic promotion. But were the children learning anything? Were they receiving a "quality" education? Increasing attention came to be devoted to determining what children learned in school and what features of the overall process were related to their accomplishments. One severe limitation in this new area of effort was the scarcity of reliable measures of learning. While reasonable measures for such subjects as language, mathematics and science could be devised, researchers experienced difficulty in developing measures of skills or values. As a result, determinations of quality came to be based on traditional academic subjects.

An influential study was conducted in the United States during this period by James Coleman,[1] who concluded that minorities received a lower quality of education than did members of the majority group, and did not fare as well on achievement tests. However, Coleman also observed that differences in the quality of educational inputs were not the most important factor in explaining the lower educational achievement of minorities; he pointed instead to various "out of school" factors. Coleman-type studies were widely replicated throughout the world both by individual researchers and in the International Educational Achievement (IEA) survey. Various analysts, comparing the pattern of findings from these numerous studies, reported that school factors had a much greater impact in third-world countries than in the first world. Studies of this kind tend to be very popular even today.

Effective schools. While Coleman's and other such studies focused primarily on the relationship between academic achievement and what went into schools (parental background, teachers, textbooks, buildings, etc.), educators in recent years have urged that greater attention be given to what happens inside the schools. They point out that certain schools, while objectively no different from other schools in terms of these inputs, nevertheless have a much greater impact on children. These educators have sought to detail the features of these effective schools, and suggest that such factors as leadership, clear goals, a positive school climate and discipline make a difference. A recent theme has been to suggest that schools that have considerable discretion in managing themselves tend to achieve

[1] James S. Coleman and others, *Equality of Educational Opportunity* (Washington, D.C., U.S. Government Printing Office, 1966).

greater effectiveness than those whose actions are circumscribed by large bureaucracies.

Annex table. The Heritage of Indicators

Consideration	Problem	Indicator
Bureaucracy	How many schools are there?	Basic statistics
Progressivism	How well are they run?	Efficiency
Socialism	Are graduates working?	External efficiency
Access	Who gets in?	Enrolment ratios
Social mobility	Does education increase an individual's chances?	Mobility rates
Economic returns	Should the public support education?	Rates of return by level
Costs-benefits	Which inputs are most beneficial?	Expenditures
Educational production	Do schools make a difference?	Student achievement
Effective schools	Why do some schools do better?	School climate
Participation	Who controls schools? Who pays?	Parent surveys

Community participation While the mainstream of educational planning focuses on formal units within the governmental structure and educational bureaucracy, a counter-current has always urged greater attention to the concerns of the recipients of education. Leading spokespeople for the increased involvement of parents, communities and NGOs stress the rigidities and limitations of bureaucracies and the vital importance of capitalizing on the wisdom and energy available in traditional organizations.[2,3] This participatory tradition

[2] Sheldon Shaeffer (ed.), *Collaborating for Educational Change: The Role of Teachers, Parents and the Community in School Improvement* (Paris, International Institute for Educational Planning, 1992).

[3] David C. Korten, "Community organization and rural development: a learning process approach", *Public Administration Review* (1980), pp. 480-511.

relies primarily on qualitative evidence to illustrate its proposals and recommendations

Over time, educational planners have multiplied the criteria employed to evaluate the accomplishments of educational systems. Early criteria were relatively easy to measure, while those proposed in more recent years are more complex, requiring greater care and expense to realize.

Also over time, an important shift has occurred in the focus of measurement -- from a concern with all children in a population to those who make it to school. This shift has been justified because of the considerable improvement in enhancing access (most children are in school) and because of the lowered costs when measurement focuses on the subset of the children who can be reached by organizations.

Many of the latest "advances" have been proposed by researchers who are trained and/or work in the more developed countries, where educational circumstances often differ greatly from those in the third world. Finally, some priorities are less frequently discussed in the developed countries (and hence lack adequate measurements) -- not because they are unimportant, but rather because the first-world researchers and policy makers have not prioritized them. This does not mean they should be ignored, however.

Bibliography

Ahmed, Manzoor "Quality and relevance: concept and practice." *Forum for Advancing Basic Education and Literacy* (1992)

Anderson, Mary B. "Policy options for improving access to education." *Forum for Advancing Basic Education and Literacy* 1 (June 1991) (Also: Project BRIDGES, Harvard Institute for International Development, Harvard University and the United States Agency for International Development, Cambridge, Massachusetts, December 1990.)

de Arboleda, V. Colbert. "Universalization of primary education in Colombia: the 'New School' programme." In C.A. Rojas and Z. Castillo, eds., *Evaluacion del Programa Escuela Nueva en Colombia*. Bogota, Colombia, Instituto SER de Investigacion, 1988. (draft version)

Bajunid, Ibrahim

Beeby, C.E. *The Quality of Education*. Cambridge, Massachusetts, Harvard University Press, 1966.

Benavot, Aron, and Phyllis Riddle. "The expansion of primary education, 1870-1940: Trends and issues." *Sociology of Education* 61 (July 1988)

Blum, Carol. *Rousseau and the Republic of Virtue: The Language of Politics in the French Revolution*. Ithaca, New York, Cornell University Press, 1986.

Cameroon, Ministry of Education. *Handbook of Education*. Yaounde, Cameroon

Carceles, Gabriel. "World literacy prospects at the turn of the century: Is the objective of Literacy for All by the Year 2000 statistically plausible?" *Comparative Education Review* 34 (1). (February 1990)

Carnoy, Martin. *The Case for Investing in Basic Education*. New York, UNICEF, 1992.

Carnoy, Martin, and Joel Samoff. *Education and Social Transition in the Third World*. Princeton, Princeton University Press, 1989.

Cassidy, Thomas. Harvard University, Graduate School of Education. Ph.D. thesis, 1990.

Chapman, David W., and C.A. Carrier, eds. *Improving Educational Quality: A Global Perspective*. Greenwich, Connecticut, Westview Press, 1990.

Chapman, David W., and Conrad W. Snyder, Jr. "Is teacher training associated with teachers' classroom behavior in the third world?" (mimeo) 1989.

Chesterfield, R., and H.N. Seeley. "Process evaluation of the Programa Nacional de Education Bilingué (PRONEBI)." *Final Report*. United States Agency for International Development/Guatemala and PRONEBI, 1987.

Coleman, James S., and Thomas Hoffer. *Public and Private High Schools*. New York, Basic Books, Inc., 1987.

Coleman, James S., and others. *Equality of Educational Opportunity*. Washington, D.C., US Government Printing Office, 1966.

Crouch, Luis A., Jennifer Spratt, and Luis M. Cubeddu. "Examining social and economic impacts of educational investment and participation in developing countries: the Educational Impacts Model (EIM) approach." *BRIDGES Research Report Series No. 12*. Cambridge, Massachusetts, Harvard Institute for International Development, April 1992.

Cuadra, Ernesto. "Indicators of student flow rates in Honduras: an assessment of an alternative methodology." *BRIDGES Research Report Series No. 6*. Cambridge, Massachusetts, Harvard Institute for International Development, December 1989.

Cummings, William K. *Education and Equality in Japan*. Princeton, Princeton University Press, 1980.

_____. *Low-Cost Primary Education: Implementing an Innovation in Six Nations*. Ottawa, Canada, IDRC, 1986.

Cummings, William K., ed. *Reaching Peripheral Groups: Community, Language and Teachers in the Context of Development. Special Studies in Comparative Education*, No. 31. New York, State University of New York at Buffalo.

Cummings, William K., and Abbey Riddell. "Alternative policies for the finance, control, and delivery of basic education." HIID Development Discussion Paper No. 422 ES. Cambridge, Massachusetts, Harvard Institute for International Development, May 1992.

Cummings, William, and Florence Kiragu. "SHARE: systems to help access reports of effective education." *Forum for Advancing Basic Education and Literacy* (January 1992).

Cummings, William K., G.B. Gunawardena, and James H. Williams. "The implementation of management reforms: the case of Sri Lanka." *BRIDGES Research Report Series No. 11*. Cambridge, Massachusetts, Harvard Institute for International Development, February 1992.

Cummings, W K , M R Suparman, and I M Thoyib "The Indonesian school principal broadening responsibility " A paper prepared for the IEES - EPP Workshop held in Jodjakarta, Indonesia, in June and July 1992

Cummings, William K , S Gopinathan, and Y Tomoda *The Revival of Values Education in Asia and the West* New York, Pergamon Press, 1988

Dall, Frank "Basic education an investment in a better African future In *Africa's Children, Africa's Future Background Sectoral Papers* New York, UNICEF/OAU, 1992

_____ "Basic education as a child right the challenge of implementation " In *Innocenti Centre Occasional Paper Series*, No 4 Florence, UNICEF, 1993

Dove, L "Lifelong teacher education and the community school " *UIE Monographs*, No 10 Hamburg, UNESCO Institute for Education, 1982

Eisemon, T "Becoming a 'modern' farmer the impact of primary schooling on agricultural thinking and practices in Kenya and Burundi " In D Wornen, L Slikkerveer and S Titilola, eds , *Indigenous Knowledge Systems Implications for Agriculture and International Development* Ames, Iowa, Iowa State University, 1989

Fafunwa, A Babatunda "Education in the mother tongue a Nigerian experiment " *Journal of African Studies* (1987)

Foster, Philip J "The fallacy of vocational education in development planning " In Karabel and Halsey, eds , *Power and Ideology in Education* Oxford, Oxford University Press, 1977

Fuller, Wayne *The Old Country School The Story of Rural Education in the Middle West* Chicago, University of Chicago Press, 1982

Gardner, Roy "Case study the Cianjur Project " In Val Rust and Per Dalin, eds , *Teachers and Teaching in the Developing World* New York, Garland Publishing Inc , 1990

Gildea, Robert *Education in Provincial France 1800-1914* Oxford, Clarendon Press, 1983

Glass, Gene V , Barry McGaw, and Mary Lee Smith *Meta-Analysis in Social Research* Beverly Hills, California, Sage Publications, 1981

Glenn, Charles Leslie, Jr *The Myth of the Common School* Amherst, University of Massachusetts Press, 1988

Grand, James P , the late Executive Director of UNICEF

Guthrie, Gerald. "To the defense of traditional teaching in lesser developed countries." In Val D. Rust and Per Dalin, eds., *Teachers and Teaching in the Developing World*. New York, Garland Publishing Inc., 1990.

Haddad, Wadi. "Educational and economic effects of promotion and repetition practices." *World Bank Staff Working Paper 319*. Washington, D.C., World Bank, 1979.

Heyneman, Stephen P., and William Loxley. "The effect of primary-school quality on achievement across twenty-nine high- and low-income countries." *American Journal of Sociology* 88 (6), (June 1983).

Heyneman, Stephen P., Dean Jamison, and Xavier Montenegro. "Textbooks in the Philippines: evaluation of the pedagogical impact of a nationwide investment." *Educational Evaluation and Policy Analysis* 6 (2), (1984).

Huh, Unna. "Designing education for the 21st century: the Korean experience." *Forum for Advancing Basic Education and Literacy* 1 (3), (January 1992).

Improving the Efficiency of Educational Systems (IEES) Project. "A review of teacher education issues in Indonesia." IEES Project, Florida State University, 1990.

Indonesia. Ministry of Education and Culture. Centre for Informatics. *Educational Indicators: Indonesia*. Jakarta, Centre for Informatics, 1990.

Jamison, Dean, and others. "Improving elementary mathematics education in Nicaragua: an experimental study of the impact of textbooks and radio on achievement." *Journal of Educational Psychology* 73 (4), (1981).

Japan. Ministry of Education, Science, and Culture. *Japan's Modern Educational System: A History of the First Hundred Years*. Tokyo, 1980.

Jenkins, Kenneth D. "Restructuring a U.S. school." *Forum for Advancing Basic Education and Literacy* 1 (3), (January 1992).

Joint UNICEF-NCERD-UNESCO Regional Seminar on Monitoring Learning Achievement, held in Amman from 23 to 26 July 1994. Final report.

Kemmerer, Frances. "An integrated approach to primary education incentives." In David W. Chapman and Carol A. Carrier, eds., *Improving Educational Quality*. New York, Greenwood Press, 1990.

Kennedy, Paul. *The Rise and Fall of Great Powers*. New York, Random House, 1989.

Korten, David C. "Community organization and rural development: a learning process approach." *Public Administration Review* (1980).

Lewin, Keith, Angela Little, and Christopher Colclough "Adjusting to the 1980s taking stock of educational expenditure" In IDRC, *Financing Educational Development*, the proceedings of an international seminar held in Mont Sainte Marie, Canada from 19 to 21 May 1982 (Canada, IDRC, 1982)

"Liberian education and human resources sector assessment, 1988" In David Chapman, *Facilitator Manual Formulating Conclusions and Recommendations* New York, UNICEF, 1992

Lockheed, Marlaine E , Adriaan M Verspoor, and associates *Improving Primary Education in Developing Countries* Washington, D C , World Bank, 1991

Lyons, Raymond, F , ed *Problems of Educational Administration in Remote Rural Areas Report of an Expert Meeting in Kathmandu* Nepal, UNESCO/ International Institute for Educational Planning, 1980

McGinn, Noel F , and Allison M Borden *Better Education for All A BRIDGES Manual for Managers and Policy Makers* (monograph) Cambridge, Massachusetts, Harvard Institute for International Development, September 1992

Naik, Chitra "An action-research project on universal primary education" *Indian Institute of Education Bulletin* 2 (1981)

Nielsen, D , and H C A Somerset "Primary teachers in Indonesia supply, distribution, and professional development" (mimeo) December 1992

Passin, Herbert *Society and Education in Japan* New York, Teachers College Press, 1965

Peters, Thomas J , and Robert H Waterman *In Search of Excellence* New York, Warner Books, Inc , 1982

Pierre, Victor *L'Ecole sous la Révolution Française* Paris, Librairie de la Société Bibliographique, 1881

Plank, David "The expansion of education a Brazilian case study" *Comparative Education Review* 31 (August 1987)

Psacharopoulos, George, and Maureen Woodhall *Education for Development An Analysis of Investment Choices* New York, Oxford University Press, 1985

Ringer, Fritz K *Education and Society in Modern Europe* Bloomington, Indiana University Press, 1979

Ruiz-Duran, G "Experience of educational micro-planning in Peru through nuclearization" In *Educational Administration and Multi-level Plan Implementation Experience from Developing Countries IIEP Seminar Papers* Paris, UNESCO, 1983

Sakaiya, Taichi *The Knowledge-Value Revolution* Tokyo, Kodansha International, 1991

Shaeffer, Sheldon "Educational quality redefined" *Forum for Advancing Basic Education and Literacy* 1 (3), (January 1992)

Shaeffer, Sheldon, ed *Collaborating for Educational Change The Role of Teachers, Parents and the Community in School Improvement* Paris, International Institute for Educational Planning, 1992

SHARE Project Abel Harvard Institute for International Development (HIID) Cambridge, Massachusetts, 1992

Shils, Edward *Center and Periphery Essays in Macrosociology* Chicago, University of Chicago Press, 1975

Snodgrass, Donald *Inpres Sekolah Dasar* Report No 5 Jakarta, Center for Development Program Implementation Studies, 1984

Somerset, H C A "Examination reforms the Kenya experience" *Education and Training Department Discussion Paper EDT64* Washington, D C , World Bank, 1987

State University of New York at Buffalo Center for Comparative and Global Studies in Education "Political impacts of education" New York, 1994

Tan, Jee-Ping, and Alain Mingat *Education in Asia A Comparative Study of Cost and Financing* Washington, D C , World Bank, 1992

Tatto, Maria Teresa "Policies for teachers in peripheral areas a review of the literature" 1993

Tatto, M T , D H Nielsen, W Cummings, N G Kularatne, and D L Dharmadasa "Comparing the effects and costs of different approaches for educating primary school teachers the case of Sri Lanka" *BRIDGES Research Report Series No 10* Cambridge, Massachusetts, Harvard Institute for International Development, 1991

Theisen, Gary, and others *An Analysis of the Status of Curriculum Reform and Textbook Production in Indonesia* Florida, Florida State University - Improving the Efficiency of Educational Systems (IEES), 1991

Thomas, Christopher, and Christopher Shaw. "Issues in the development of multi-grade schools" (draft). Washington, D.C.: World Bank, September 1992.

Tyack, David B. *The One Best System: A History of American Urban Education*. Cambridge, Massachusetts: Harvard University Press, 1974.

Tyler, Ralph W. *Some Principles of Curriculum and Instruction*. Chicago: University of Chicago Press, 1949.

United Nations. Population Division report (1988 revision). New York.

United Nations Children's Fund (UNICEF). A case-study of the Community Schools Initiative. Cairo, 1994.

_____. "A survey of access to primary education and acquisition of basic literacy skills in three governorates of Egypt." Cairo: UNICEF, 1994.

_____. Bangladesh Rural Advancement Committee. "BRAC non-formal education appraisal: feasibility of first expansion phase." Dhaka, June 1993.

_____. *Children and Women in India: A Situation Analysis*. India: UNICEF, 1990.

_____. *Learning for the 21st Century: Strategies for Female Education in the Middle East and North Africa*. Amman: UNICEF-MENARO, 1994.

_____. Regional Office for the Middle East and North Africa (MENARO). Various graphs, 1991 to 1994.

_____. "Pakistan situation analysis." Islamabad: UNICEF.

_____. *The State of the World's Children 1991*. New York: Oxford University Press for UNICEF, 1991.

_____. *Strategies to Promote Girls' Education: Policies and Programmes That Work*. New York: UNICEF, 1991.

_____. *Training Resource Manual for a Flexible Training Program in Comprehensive Education Analysis*. New York: UNICEF, 1992.

_____. "The United Nations Convention on the Rights of the Child." *The State of the Worlds' Children 1991*. New York: Oxford University Press for UNICEF, 1991.

_____. *World Declaration on the Survival, Protection, and Development of Children*. World Summit for Children, held in New York from 29 to 30 September 1990.

United Nations Development Programme (UNDP). *Human Development Report 1991*. New York: UNDP, 1991.

_____. *Human Development Report 1992*. New York: UNDP, 1992.

United Nations Educational, Scientific and Cultural Organization (UNESCO) report, 1984

_____ *Statistical Yearbook* Various issues, 1980-1992

_____ *World Education Report 1993* Paris, UNESCO, 1993

United States Agency for International Development (USAID) Office of Education *Lessons Learned in Basic Education in the Developing World* Washington, D C , USAID, 1990

United States Department of Education *What Works Research about Teaching and Learning* Second edition Washington, D C , US Department of Education, 1987

_____ *What Works Schools That Work Educating Disadvantaged Children* Washington, D C , US Department of Education, 1987

Verspoor, Adriaan, and J L Leno "Improving teaching a key to successful educational change lessons from World Bank experience " A paper presented at the Annual IMTEC Seminar, held in Bali, Indonesia, in October 1986

Weiner, Myron *The Child and the State in India* Princeton, Princeton University Press, 1991

Wheeler, Christopher W , and others "Policy initiatives to improve primary school quality in Thailand an essay on implementation, constraints, and opportunities for educational improvement " *BRIDGES Research Report Series No 5* Cambridge, Massachusetts, Harvard Institute for International Development, 1989

Windham, Douglas *Indicators of Educational Effectiveness and Efficiency* Paris, UNESCO - International Institute for Educational Planning, 1989

_____ "Indicators of educational efficiency " *Forum for Advancing Basic Education and Literacy* (September 1991)

_____ "The role of basic education in promoting aggregate effects and marginalized populations " In Herbert Walberg and David W Chapman, eds , *International Perspectives in Educational Productivity* Greenwich, Connecticut, JAI Press, 1992

Windham, Douglas, and D W Chapman *The Evaluation of Educational Efficiency Constraints, Issues and Policies* Greenwich, Connecticut, JAI Press, 1990

World Bank "Textbook availability review " London Publishers Association, 1989

_____ *World Development Report, 1991* Washington, D C , World Bank 1991

World Conference on Education for All (WCEFA), held in Jomtien, Thailand, from 5 to 9 March 1990 *World Declaration on Education for All* and "Meeting basic learning needs a vision for the 1990s" New York, Inter-Agency Commission UNDP/UNESCO/UNICEF/World Bank, 1990

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